VOLUME II OF II, APPENDICES E & F

ENERGY SAVINGS OPPORTUNITY SURVEY FORT GILLEM, GEORGIA

Prepared for

SAVANNAH DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

Under

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September 1992

EMC No. 3105-000

19971016 247

E M C ENGINEERS, INC. 1950 Spectrum Circle Suite B-312 Marietta, Georgia 30067 Phone (404) 952-3697

DEPARTMENT OF THE ARMY

CONSTRUCTION ENGINEERING RESEARCH LABORATORIES, CORPS OF ENGINEERS P.O. BOX 9005 CHAMPAIGN, ILLINOIS 61826-9005

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- E F COMPUTER SIMULATIONS
- FIELD SURVEY NOTES

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LIST OF ABBREVIATIONS

ACH - air changes per hour

AAFES - Army Air Force Exchange Service

AHU - air handling unit

Bldg - building

cfm - cubic feet per minute

conf. - confirmation

DCU - digital control unit
DDC - direct digital control

DEH - Director of Engineering and Housing

DHW - domestic hot water
DX - direct expansion

ECIP - Energy Conservation Investment Program

ECO(s) - Energy Conservation Opportunity(ies)
ESOS - energy savings opportunity survey

F - Fahrenheit
FCU - fan coil unit
ft - foot, feet
FY - fiscal year

gpm - gallons per minute

hp - horsepower

HPS - high pressure sodium

hr - hour(s)
HW - hot water
in. - inch(es)

kVar - kilovolt amp reactive

kW - kilowatt, one thousand watts

kWh - kilowatt-hour, one thousand watthours

LAPS - lighting automation panels

LBH - pounds per hour lbm - pounds mass

LCCID - Life Cycle Cost in Design

MBtu - British thermal units (thousand)

mcf - thousand cubic feet

LIST OF ABBREVIATIONS

(Continued)

MCA - Military Construction Army Program

MCP - Military Construction Program

NAF - non-appropriated funds
PRV - pressure reducing valve

psia - pounds per square inch, absolute

psig - pounds per square inch, gauge

QRIP - Quick Return on Investment Program

RCU - remote control unit

rpm - revolutions per minute SES - Shared Energy Savings

SIOH - supervision, inspection, and overhead

SIR - Savings-to-Investment Ratio

SOW - Scope of Work therm - 100,000 Btus

UCS - utility control system
UPW - uniform present worth

APPENDIX E COMPUTER ENERGY SIMULATION BACKUP DATA

BUILDING 101

PROJECT: FORT McPHERSON & FORT GILLEM ESOS STUDY LOCATION: FORT GILLEM

ECO: Computer Simulation Summary

CLIENT CONTRACT NO: DACA21-91-C-0097 CLIENT PROJECT ENG: TERRY SEABROOK

EMC PROJECT: #3105.000 DATE: 13-APR-92

FILE: G101ECO.WK3
PREPARED BY: R. GERRANS
CHECKED BY:

רטרם :Bidg:	Heating Heating	Heating	Cooling	Fan	Pirmo	Lighting	Recept.	Total	Peak	Total	Total
	Gas	Electric	Electric	Electric	Electric	Electric	Electric	Electric	Electric	Gas	Energy
Run	Use	Use	Use	Use	Use	Use	Use (kWh/vr)	Use (kWh/vr)	Demand (kW)	Use (MBtu/vr)	Use (Mbtu/vr)
Baseline	523,833	8,551	299,666	416,645	236,958	729,764	439,234	2,130,817	670	524	1
I West	20E 4E7	A 796	NEN 580	416 645	236 958	792 662	439 234	2 112 770	651	305	7,514
Savinos/(Loss)		1,815	16,232	0	0	0	0	18,047	19	219	280
		670	100	740 044	000	1007	A20 00A	2 407 435	661	401	7 660
ECO#2	401,179	6,910	297,925	410,045	230,938	729,704	439,234	2,121,2	- G	101	134
Savings/(Loss)	122,653	35	1,741	ס	>	2	D	3,302	D		
ECO#3	505 158	8.356	299.243	416,645	236,958	729,764	439,234	2,130,199	899	505	7,773
Savings/(Loss)	18,675	196	423	0	0	0	0	618	2	19	2
# CO3	503 833	8 551	297 878	416 645	236.958	729.764	439.234	2.129.030	670	524	7,788
Savinos/(Loss)	000000		1,788	0	0	0	0	1,788	0	0	9
FCO#7	028 086	2.538	277.243	416.645	140.860	729.764	439.234	2.006,253	670	290	7,136
Savings/(Loss)		6,013	22,453	0	96,098	0	0	124,564	0	233	658
ECO#10	221 515	2 047	192.948	349.638	132.000	729.764	439.234	1,845,631	613	222	
Savings/(Loss)	302,318	6,504	106,718	67,007	104,958	0	0	285,187	25	305	1,275
ECO#13	523.833	8.551	312,788	416,645	236,958	729,764	439,234	2,143,939	544	524	7,
Savings/(Loss)	0		(13,122)	0	0	0	0	(13,122)	126	0	(45)
ECO#15	565 330	020 6	281.067	416.645	236.958	613.004	439,234	1,995,929	670	565	7,375
Savinos/II oss				0	0 0	116,760	0	134,889	0	(41)	419
	1			**************************************							

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Computer Simulation Bldg 101, Gillen

E(0 #1 - Wall Insulation

Wall U-value
- add R-9 to existing well

R = 13.01 U = 0.08

original U= 0.25

Area = 35, 512 ft2

Original UX = 8,878

Improved UA = 2, 841

DUA = 6,037

Electric Savings

Total Electric Savings = 18,047 KWh/yr Electric Sovings/AUA = 3.0 KWh/AUA

Demand Savings

Pock Demand Savings = 19:W
Domand Savings / AUA = [3.1=10-3] KW/AUA

Gas Savings

Total Gas Savings = 219 MBtu/yr
Gas Savings / DUA = [0.036] MBtu/DUA

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Computer Simulation Bldg 101, Gillem

E(0 #2 - Insulated glass

Window U-Volve -ASHRAE F 27.13 -double pane, Al frame, recoment U= 0.651

Window shading coofficient ASHRAE F 27.26 30.58

Window Area = 6,468 ++2

Electric Savings

Total Electric Savings = 3,382 xwh/yr Electric Savinge / 4+2 [0.52] KWh / 4+2

Demand Savings

Peak Demand Savings = 9 EW Demand Savings /f+2 = [1.4 × 10-3] KW/1+2

Gas Savinge

Total Gas Savings = 123 MBtulyr Gas Savings / f12 = 0.019 MB10/112

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Congular Simulation - Fldg 101, Gillow

ECO #3 - Weather dring + (nothing

Q = L (A At + B v2) /2

A - stock coefficient = 0.0629 - 4 stories estrapolited ASHRAE Table F 23,7 B-wind roethiciat= 0.0030 - modium chiriding ASARAE Table F23.8 V- ava wind velocity = 12.65 mph

At = 72 % - 55 . F = 17. [

1 - offective length = Avea *(in3/1) - ASHRAE Table F 23.3 Present (ADE+By2) 1/2 = (0.0629(17)+0.0039(17.6512)1/2 = 1.301

windows no wate, single, hung, macon wall

wirdow: 0.063

France: 0.003

doors: nows le, double, maion well

door: 0.16

frame: 0,072

Improvo

window : ws le, single, hung, wrown wall

window 0.03 ?

Frame: 0.019

deare wishe double , was well

door: 0.114

Frame: 0.0143

Room 1 -no intiltration

From 2 window: 30 (28 H2) = 840 H2 down: 7(5'x7') = 245 ft2

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Competer Similation - Bldg 101, Gillem

E(U #3 (con))

Room 2 Front

Proport

window: 0 063 (840) = 52.9 frame : 0 093 (840) = 78.1 door : 0.16 (248) = 39.2 fromp: 0.072 (202) = 17.6

Q= 187.9 (1.301) = 244 Am

Improvod

window: 0.032/830 = 26.9

Frame: 0,010 (840) = 16.0

door: 0,114(215) = 27.9

frame: 0.014?(242) = 3.5

Q = 74.3(1.301) = a7 cfm AD= 244-97 = 147 da

Room 3 - no intiltudion

Room 4

Windows: 63 (78 417) = 1764 112

Prosport

window: 0.063 (1,764) = 111.1

Frame: 0 093/1,764) = 164.1 275.2

Q= 275,2(1301)= 358 ctm

Improved

wirdow: 0032/1,764) = 56.4

Frame: 0.019 (1,764) = 33.5

90.0

a= 90.0(1.301) = 117 cfm

DQ= 358-117= 241 cfm

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Compter andalian Bldg 101, Gillon

ECO#3 (cont)

Room 5

windows = 95 (28 ft?)= 2,560 ft2

Prosent

window 0.063 (2.660) = 167.6 frame : 0.093/7.560) = 247.4

0=4150(1301) = 540 Am

Improved

window: 0.032(2,660) = 85.1 framo: 0.019(2,660) = 50.5 135 6

Q=135.6(1.301)=176 An AQ = 540-176 = 364 clm

Totale

From Z: 2,052 Am - 147 Am = 1905 Am Room 4. 4, 116 Am - 241 Am = 3875 Am From 5: 5,821 Am - 364 Am = 5457 Am A Am= 752, fm

Electric Savings

Total Electric Sovings = 668 EWh/yr Electric Savings/cfm = [0.89] cwh/cfm

Demand Savings

Peak Demand Sovings = 2 KW Demand Savings /ctm = 2.7 × 10-3 × W/ctm

Gas Savings

Total Gas Savings = 19 MBtu/yr Gas Savings = [0.025] MBtu /cfm

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Computer Simulation Bldg 101, 6	illow	
E(O # 6 - Economizor		
- dry bulb provowizer's	or 4th floor AHU",	100% CA
Electric Savings		

Electric Savings

Total Electric Sovings = 37,833 kWh/yr

Domand Savings

Peak Domand Savings = 0 kW

Gas Savings

Total Gas Savings = 0.0 MBtu/yr

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Computer Simulation Bldg	101, G. Hom	
ECO #7 - Pump control		
- Circulation Pumpe - 4:	U. ATW year issu	<i>)</i> `
- Cycle w/ load		
- time dockers on on	5000 - 13:00 M	-E, off otherwise
- CHW Pumps	a tero 2, 4, 6	
- '2 Cp		
-time lake or 05 00 - 18		
- 50 mgs = 1.25 ur) (0.70 % 60%)	1080 1 5831 cm	-11/1/2/2011
(> 76.4 %	j	= [33] (0.4)
701-1 11660		20
CHMI + CHMS + DIM+ K	- 1,13	(3
31,974 + 10,074 - 97,602+	2,371 - 1,16	8= 140,860 cwl/m
Domand Saving.		
Pork Domard Savings	= 10 KW	
Electric Sovings	_	
Total Electure Sacings:	-[124,514] will	·/yu
Car Carrie		

Total Gre Savinge = 233 MBtuly

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Computer Simulation Bldg 101,	Gillow	
ELO #15 - HATC Control		
-Respt dock temper	ck. on: 0600-1801 M-F din (diring value) whs, 70 °F Heating 78°1	
ICU: 3 = Floor	uts: 70° E Hooting 78° E.	
Funpi -Add cycling cont. Electric Savings	gs = 285,187 kwh/yr	
Demand Savings Peak Demand Saving		

Total Gas Savings = 302 MBtulyn

Gas Savings

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Competer Simulation	Bldg	101,	6.110 m
---------------------	------	------	---------

E(0 # 13 - Thermal Storage

Discharge Tank: 2:00 - 15:00 Charge Tank 0:00 - 0600 Tank Capacity: 751 Ton-Hor Chiller Capacity: 125 Ton

Downard Savings

#2 (hiller & w/ton = 1 1 1 27 & w/ton

#2 (hiller & = 1 129 & w/ton

#3 (hiller & = 1 064 kw/ton

% Fools Chiller

10 3 1.085 ku/ton

Pook HimitAug) = 116 done

Pook downerd Sovings = 116 * 1085 = 125.8 = [126] kw

Additional Electrical

Additional Electrical = 13,122 KWh/yr

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Computer Simulation Bldg 101, Gillam

ECO # 15 - Lighting Reduction

Light Reduction vaduation = 16%

Rm	Present (W)	Fedural(W)
l	12,100	10,164
ح	12,800	10,752
3	18,820	15, 809
4	34, 930	29, 241
5	58,740	49,342
6	28,750	24,150
	166,140	139,558

Reduced KWh = 116,760 Whlyr

Electric Factor

Reduced electric use = cooling-heating 18,598-496=18,102 www. Electric cavings / lighting & Wh = [0, 16] KWh sould KWh lighting

Gas Factor

Increased gas use = 41, T MBtulyr Gas increwed lighting & Wh = 3.6 · 10-4 MBto / EWH

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E(0: 1,2, 3, 6, 12,13

Computer Consistion Bldg 101, Gillon landing Bldg Type: Brick Admin Arm. 120, 182 112

Assumptions

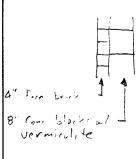
- Healing db = 72 °F
- Cooling db = 76° F
- Intitation: 12 Alt in for roil areas
- OA Vontilation: 10% in AHU's

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Comp Simulation Fldg 101, Gillon

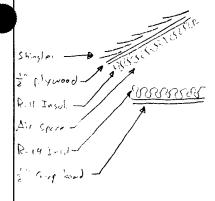
Wall U-Value - ASHRAE Table F 22.4



Material	R-Value
Outside surface (15 mph wind)	0.17
4" Face brick	1.24
8" Core Strick out vermic lite	1.02
Inside Surface (stit air)	0.68
	4.01

$$U = \frac{1}{R} = \frac{1}{4.01} = 0.25$$

Roof U-Value - ASHRAG Tuble F 22.4



Material	R-Value
Outside Surface (is imple wind)	0.17
Shingler	0,44
¿ Ply wood	0.62
R-11 Insulation	11.0
Air Spore	1.24
R-19 Incolation	19.0
¿" Gyp. Board	0.45
Inside Surface (ct: // Air)	0.68
$U = \frac{1}{336} = 0.03$	33.6

Window U-Value - ASHRAF Table F 27.13 - Single porc, rasement, Al Frame => U= 1.10

Window strade - ASHRAE Table F 27.25 · light venotion blinde 3/0.67

State Perimeter Coefficient - ASHRAE Table F 255 Fz= 0.62 Btoh/ F ft

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Comp Sim Bld	9 101, Gillon	
Misc loads	-Assumed	
1 m	Hd./413	
l	6	- comp. rooms + office.
2.	3	- office.
3	6	- Coup room + office.
4	4	· alterny rommiter
t)	4	allier compators
6	3	"and office, confile
Lightine Loads	- From ECO#19	_
Rm	Watts	
1	12,100	
S	12,800	
3	18,820	
4	34,930	
÷,	58,700	
ź	₹\$, ^{™©} Ø	
	field survey est.	made
fm	People	
1	66	
2	36	
?	45	

Int. H volion

5

- Only in fun roil areas
- -Assume 12 Air Changer/ Mour very drafty as per field survey Vantilation
 - Assume 10% OA . From mech equip schedules

80

192

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Computer Simulation

Bldg 101, Gillom

Baseline (cont)

(4) Pump #1 (10 4) (0.746 50)(0.36) = 7.3 1 W* 4,380 W/ = 31,974 ENL/

CHW Pump #2. (340) (0.746 th) (0.85) = 2.3 KW + 4.380 th = 10,074 KW/4-

DTW Purp: (30 41)(0.705 Mr) (080) = 21.1 xw+8,760 myr = 184, 836 why

HW Purp: (3 up) (0.746 "%x) (3.92) = 23 xW 4,380 m/m = 10,074 kWh/m
[0.812 off) [236,958] kwh/yn

01 Card - Job Information _____

Project: FT MCPHERSON & FT GILLEM EEAP

Location: FT GILLEM, BLDG 101 Program User: R. GERRANS

CAR	CARD 08 Climatic Information											
	Summer	Winter	Summer	Summer	Winter		Summer	Winter				
Weather	Clearness	Clearness		Design	Design	Building	Ground	Ground				
Code	Number	Number	Dry Bulb	Wet Bulb	Dry Bulb	Orientation	Reflect	Reflect				
ATT. ANTTA												

CARD 09 Load Simulation Periods									
1st Month Cooling	Last Month	Peak Cooling	1st Month Summer		1st Month Daylight				

----- Load Section Alternative #1 -----

---- Load Alternative ----

Number Description
1 BLDG G101, BASELINE

CA	RD 20 Gene	eral Room Parameters									
	Zone						Acoustic	Floor to		Duplicate	
Room	Reference	Room	Floor	Floor			Ceiling	Floor	Floors	•	Depth
Number	Number	Descrip	Length	Width	Type	Height	Resistance	Height	Multiplier	Zone	
1	1	1ST FL AHU	20697	1		2		10			
2	2	1ST FL FC	10260	1		2		10			
3	3	2ND FL AHU	168.3	62		2		10			
4	4	2ND FL FC	280	73.5		2		10			
5	5	3RD FL FC	29105	1		2		10			
6	6	4TH FL AHU	29105	1		2		10			

CA	RD 21 The	rmostat	Parameters -							
	Cooling	Room	Cooling	Cooling	Heating	Heating	Heating	T'stat	Mass /	Carpet
Room	Room	Design	T'stat	T'stat	Room	T'stat	T'stat	Location	No. Hrs	On
Number	Design DB	RH	Driftpoint	Schedule	Design DB	Driftpoint	Schedule	Flag	Average	Floor
1	76			CLG	72		HTG			
2	76			CTC	72		HTG			
3	76			CLG	72		HTG			
4	76			CLG	72		HTG			
5	76			CLG	72		HTG			
6	76			CLG	72		HTG			

-----CARD 22-- Roof Parameters ------

Roof

Room	Roof	Equal to	Roof	Roof	Roof	Const	Roof	Roof	Roof
Number	Number	Floor?	Length	Width	U-Value	Type	Direction	Tilt	Alpha
6	1	YES			.03	39			

Room	Wall				Wall				Ground
	Matt	Wall	Wall	Wall	Constuc	Wall	Wall	Wall	Reflectance
Number	Number	Length	Height	U-Value	Туре	Direction	Tilt	Alpha	Multiplier
M	1		10	. 25	87				
1	1	203.5				45			
1	2	125				135			
1	3	203.5				225			
1	4	188.5				315			
2	1	141.5				45			
2	2	83.5				135			
2	3	141.5				225			
2	4	20				315			
3	1	62				45			
3	2	80				135			
3	3	62				225			
3	4	80				315			
4	1	283				45			
4	2	103.5				135			
4	3	283				225			
4	4	103.5				315			
5	1	345				45			
5	2	163.5				135			
5	3	345				225			
5	4	163.5				315			
6	1	345				45			
6	2	163.5				135			
6	3	345				225			
6	4	163.5				315			

CI	ARD 25	Wall/Glas	ss Parame	ters							
				Pct Glass			External	Internal	Percent		Inside
Room	Wall	Glass	Glass	or No. of	Glass	Shading	Shading	Shading	Solar to	Visible	Visible
Number	Number	Length	Width	Windows	U-Value	Coefficient	Type	Туре	Ret. Air	Transmittance	Reflectance
M	4 .	7	4		1 1	67					

CA	RD 25	Wall/Glas	ss Parame	ters							
_		~3	41	Pct Glass		a 41	External		Percent	Visible	Inside
Room	Wall	Glass	Glass	or No. of		Shading Coefficient	Shading	Shading Type	Solar to	Transmittance	Visible Reflectance
Number 1	Number 1	Length	MIGCII	15	0-varue	COSTITCIONE	TYPE	TAbe	Noc. nas	TT GITTE COLLCE	veriec rance
1	2			9							
1	2			6							
1				8							
2	1			13							
2	2			7							
2	3			8							
2	A			2							
3	1			5							
3	2			-							
3	3										
3	4										
4	1			26							
4	2			10							
4	3			19							
4	4			8							
5	1			31							
5	2			18							
5	3			28							
5	4			18							
6	1										
6	2										
6	3										
6	4										

Room						Reheat	Cooling	Heatin	g Auxilia	ry Room	Daylighti
Number	People	Lights	Ventila	tion :	Infiltration	n Minimum	Fans	Fan	Fan	Exhaust	Controls
l	ADMPPL	ADMLGTEQ	AVAIL	(OFF		AVAIL				
2	ADMPPL	ADMLGTEQ	OFF	2	AVAIL		AVAIL				
1	ADMPPL	ADMLGTEQ	AVAIL	(OFF		AVAIL				
ļ	ADMPPL	ADMLGTEQ	OFF	1	AVAIL		AVAIL				
5	G1013PPL	G1013LGT	OFF	2	AVAIL		AVAIL				
5	ADMPPL	ADMLGTEQ	AVAIL	(OFF	-	AVAIL				
C	ם ב-27 חפו	eonle and	Lights								
CA	ARD 27 P	eople and	Lights				Lighting		Percent	Dayligi	nting
		•	•	People		Lighting	Lighting Fixture	Ballast	Percent Lights to	Dayligh Reference	nting Reference
loom	People	People P	eople :			Lighting Units	-	Ballast Factor			-
CA Room Tumber L	People Value	People P Units S	eople :	People	Lighting		Fixture		Lights to	Reference	Reference

----- System Section Alternative #1 ------

CA		-	•				Lig	hting				Day	-	_		
Room	People	_	People	_	Lightin				Ballast	-					ce	
Number		Units	Sensible			Units		e	Factor	Ret.	Air P	oint 1	Po	int 2		
3	45	PEOPLE	250	200	18820	WATTS										
4	80	PEOPLE	250	200	34930	WATTS										
5	192	PEOPLE	250	200	58740	WATTS WATTS										
6	77	PEOPLE	250	200	28750	WAIIS	1									
CA	IRD 28	Miscella	aneous Equ	ipment -												
	Misc			En	ergy Er	nergy		Energy	y Perc	ent			ercent			
Room	Equipme	nt Equi	pment	Co	nsump Co	onsump S	chedule	Meter	of L		Misc. I				Radiant	Optional
Number		Desc		Va			ode	Code	Sens	ible	to Room	ı to	Ret.	Air	Fraction	Air Path
1	1	MISC	EQUIP	6	B	TUH-SF A	DMLGTEQ	ELEC								
2	1	MISC	EQUIP	3	Bī		DMLGTEQ									
3	1	MISC	EQUIP	6	B:	TUH-SF A	DMLGTEQ									
4	1	MISC	EQUIP	4	B?		DMLGTEQ									
5	1	MISC	EQUIP	4	B		1013EQ	ELEC								
6	1	MISC	EQUIP	3	Bü	ruh-sf 1	DWLGTEQ	ELEC								
6	ARD 29	· Room Ai	EQUIP rflows entilation					- -	ration							
6	ARD 29	· Room Ai	rflows entilation					 -Infilt:	ration							
6C!	ARD 29	· Room Ai	rflows entilation	 Heatin			Cooling	 -Infilt:	ration		J Units		heat N		 m its	
6C!	ARD 29	Room Ai V poling Uni	rflows entilation	 Heatin	 	(Value	Cooling	 -Infiltr	ration He Value		J Units	Re	heat N			
6CF Room Number	ARD 29 Co Value	Room Ai V poling Uni	rflows entilation ts Val	 Heatin	 g Units	(Value	Cooling	 -Infiltr	ration HeHe		J Units	Re	heat N			
6CF Room Number 1	ARD 29 Co Value	Room Ai 	rflows entilation ts Val	 Heatin	 g Units	 Value G 1.5	Cooling Ur	 -Infiltr nits CH-ER	ration H∈ Value 1.5		Units	Re	heat N			
G Room Number 1 2	ARD 29 Co Value 10	Room Ai 	rflows entilation ts Val -MCLG 10	 Heatin	g Units PCT-MCL		Cooling Ur	-Infiltr nits CH-HR	ration He Value 1.5		Units / ACH-HR	Re	heat N			
G Room Number 1 2	ARD 29 Co Value 10	Room Ai 	rflows entilation ts Val -MCLG 10	 Heatin	g Units PCT-MCLO	Value 3 1.5 3	Cooling Ur	 -Infiltr nits CH-ER	ration H∈ Value 1.5		Units	Re	heat N			
Room Number 1 2 3	ARD 29 Co Value 10	Room Ai 	rflows entilation ts Val -MCLG 10	 Heatin	g Units PCT-MCL	Value 3 1.5 3	Cooling Ur	-Infiltr nits CH-HR	ration He Value 1.5		Units / ACH-HR	Re	heat N			
6CF ROOM Number 1 2 3 4 5	ARD 29 Cc Value 10	Room Ai 	rflows entilation ts Val -MCLG 10	 Heatin	g Units PCT-MCLO	Value 3 1.5 3	Cooling Ur	-Infiltr nits CH-HR	ration He Value 1.5		Units / ACH-HR	Re	heat N			
GROOM Number 1 2 3 4 5 6	10 10 ARD 32	Room AiV coling Uni PCT PCT	rflows entilation ts Val -MCLG 10 -MCLG 10	ue	g g Units PCT-MCLO PCT-MCLO	Value G 1.5 G 1.5 G 1.5	Cooling Ur AC	Infiltr 	rationHe Value 1.5 1.5 1.5	eating	Units / ACH-HR ACH-HR ACH-HR	Rei Valu	heat N			
6CF	10 10 ARD 32 Exposed	Room AiV poling Uni PCT PCT PCT Exposed	rflows entilation ts Val -MCLG 10 -MCLG 10 -MCLG 10	 Heatin ue	g g Units PCT-MCLO PCT-MCLO	Value G 1.5 G 1.5 G 1.5	Cooling Ur AC	Infiltrick CH-HR CH-HR CH-HR CH-HR	rationHe Value 1.5 1.5 1.5 1.5	eating	Units / ACH-HR ACH-HR ACH-HR	Re	heat N			
6CF ROOM Number 1 2 3 4 5 6CF ROOM	ARD 29 Co Value 10 10 10 ARD 32 Exposed Floor	Room AiV poling Uni PCT PCT PCT Exposed IS Perime	rflows entilation ts Val -MCLG 10 -MCLG 10 -MCLG 10 -MCLG 10 Floor Para	ueatin	g Units PCT-MCLO PCT-MCLO	Value G 1.5 G 1.5 G 7.5 Floor	Const	-Infiltr 	rationHe Value 1.5 1.5 1.5 Coc	eating	Units / ACH-HR ACH-HR ACH-HR	Rei Valu	heat M			
From Number 1 2 3 4 5 6 CF Room Number 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ARD 29 Value 10 10 10 ARD 32 Exposed Floor Number	Room AiV poling Uni PCT PCT PCT ExposedS Perime Length	rflows entilation ts Val MCLG 10	 Heatin ue	g Units PCT-MCLO PCT-MCLO	Value G 1.5 G 1.5 G 7.5 Floor	Cooling Ur AC	-Infiltr 	rationHe Value 1.5 1.5 1.5 Coc	eating	Units / ACH-HR ACH-HR ACH-HR	Re	heat M			
6CF ROOM Number 1 2 3 4 5 6CF ROOM	ARD 29 Co Value 10 10 10 ARD 32 Exposed Floor	Room AiV poling Uni PCT PCT PCT Exposed IS Perime	rflows entilation ts Val -MCLG 10 -MCLG 10 -MCLG 10 -MCLG 10 Floor Para	ueatin	g Units PCT-MCLO PCT-MCLO	Value G 1.5 G 1.5 G 7.5 Floor	Const	-Infiltr 	rationHe Value 1.5 1.5 1.5 Coc	eating	Units / ACH-HR ACH-HR ACH-HR	Rei Valu	heat M			

----CARD 39-- System Alternative ----

Number Description
1 BLDG G101, BASELINE

CA	RD 40	System Type		AT VENTET.	ATTON SYST	 EM	
System Set Number 1 2 3 4 5	System Type SZ FC SZ FC SZ FC	Ventil Deck Location	OPTION Cooling SADEVh	AL VENTIL Heating SADBVh	ATION SYST Cooling Schedule	EM Heating Schedule	Fan Static Pressure

System Set	Ref	#1	Ref	#2	Ref	#3	Ref	#4	Ref	#5	Ref	
Number	Begin	End	Begin	Enc								
1	1	1										
2	2	2										
3	3	3										
4	4	4										
5	5	5										
6	6	6										

CA	RD 45	Equipment Sch	edules							
System Set Number 1 2 3		Equipment Sch	Direct Evap Coil	Indirect Evap Coil	Auxiliary Cooling Coil	Main Heating Coil HTGC HTGC HTGC HTGC	Main Preheat Coil	Reheat Coil	Mech. Humidity	Auxiliary Heating Coil
5 6	CLGC					HTGC HTGC				

```
----- Equipment Section Alternative #1 ------
----CARD 59-- Equipment Description / TOD Schedules -----
         Elec Consump Elec Demand Demand
Alternative Time of Day Time of Day Limit
                              Max KW Alternative Description
                    Schedule
Number
         Schedule
                                    BLDG G101, BASELINE
----CARD 60--- Cooling Load Assignment-----
Load All Coil Cooling
Asgn Loads To Equipment -Group 1- -Group 2- -Group 3- -Group 4- -Group 5- -Group 6- -Group 7- -Group 8- -Group 9-
                    Begin End Begin End
Ref Cool Ref Sizing
            BLKPLANT
1
    1
            BLKPLANT 3
BLKPLANT 6
                         3
                         6
3
    3
            BLKPLANT 2
4
    4
-----CARD 62-- Cooling Equipment Parameters -----
                                          -----HEAT RECOVERY------
--Capacity-- ----Energy----
               ------COOLING-----
                                                                         Seq
                                                                                  Demand
           Num
Cool Equip
                                                                          Order Seq Limit
                            ----Energy----
Ref Code
           Of
                --Capacity--
                                                           Value Units
                                                                          Num Type Number
                              Value Units
                                             Value Units
Num Name
           Units Value Units
   EQ1121S 1
1
   EQ1120S
2
   EQ1171L
           1
3
   EQ1122L
          2
----CARD 63-- Cooling Pumps and References -----
Cool ---CHILLED WATER---- ----CONDENSER----- ---HT REC or AUX---- Switch-
Ref Full Load Full Load Full Load Full Load Full Load over Cold
                                                                   Cooling Misc.
                                                     Control Storage Tower Access.
Num Value
            Units
                    Value
                             Units
                                     Value
                                             Units
            KW
1
   7.3
    2.3
            KW
            KW
    21.1
-----CARD 65-- Heating Load Assignment ------
        All Coil
                   -Group 1- -Group 2- -Group 3- -Group 4- -Group 5- -Group 6- -Group 7- -Group 8- -Group 9-
Assignment Loads To
Reference Heating Ref Begin End Begin End
                      2
                              5
1
         1
                        1
                                    6
                                        6
2
```



CA	RD 67 E	Meating Eq	uipment P	arameters										
Heat	Equip	Number	HW Pmp				Energy		Seq	Switch				Demand
Ref	Code	Of	Full Ld		Cap'y		Rate		Order	over		Misc.		Limit
Number	Name	Units	Value	Units	Value	Units	Value	Units	Number	Control	Strg	Acc.	Cogen	Number
1	EQ2001	1	21.1	KW	5250	MBH								
2	EQ2002	1	2.3	KW	589.6	MBH								

CARD	69 Fan	Equipment	Parameters				
System							
Set	Cooling	Heating	Return	Exhaust	Auxiliary	Room	Optional
Number	Fan	Fan	Fan	Fan	Supply	Exhaust	Ventilation
1	EQ4003						
3	EQ4003						
4	EQ4371						
5	EQ4371						
6	EO4003						

Utility Description Reference Table

```
Schedules:
    ADMLGTEQ ADMIN LIGHTING AND EQUIPMENT
    ADMPPL ADMIN PEOPLE SCHEDULE
    AVAIL AVAILABLE (100%)
    CLG COOLING TSTAT SCHEDULE
    CLGC COOLING COIL SCHEDULE
    G1013EQ G101 3RD FLOOR EQUIPMENT SCHEDULE
    G1013LGT G101 3RD FLOOR LIGHTING SCHEDULE
     G1013PPL G101 3RD FLOOR PEOPLE SCHEDULE
     HTG HEATING TSTAT SCHEDULE
     HTGC HEATING COIL SCHEDULE
    OFF ALWAYS OFF
System:
     FC FAN COIL
    SZ SINGLE ZONE
Equipment:
     Cooling:
         EQ1120S AIR-CLD RECIP <20 TONS
         EQ1121S AIR-CLD RECIP 20-35 TONS
         EQ1122L AIR-CLD RECIP >55 TONS
         EQ1171L AIR-CLD COND COMP 35-60 TONS
     Heating:
         EQ2001 GAS FIRE TUBE HOT WATER
         EQ2002 GAS FIRE TUBE STEAM
         EQ4003 FC CENTRIF. FAN C.V.
         EQ4371 FAN COIL SUPPLY FAN
```

Schedule Name: ADMLGTEQ

Project: ADMIN LIGHTING AND EQUIPMENT SC

Location: Client: Program User:

Comments: OFFICE LIGHTING

Starting Month: JAN Ending Month: DEC Starting Day Type: DSGN Ending Day Type: WKDY

Hour	Util Percent
0	5
7	80
8	100
12	80
13	100
16	80
17	40
18	5
24	

Starting Month: JAN Ending Month: DEC Starting Day Type: SAT Ending Day Type: SUN

Hour	Util Percent
-	
0	5
24	

```
Schedule Name: ADMPPL
```

Project: ADMIN PEOPLE SCHEDULE

Location: Client:

Program User: D JONES

Comments: OFFICE PEOPLE SCHEDULE

Starting Month: JAN Ending Month: DEC

Starting Day Type: DSGN Ending Day Type: WKDY

Hour	Util Percent
0	0
7	50
8	100
11	80
12	40
13	80
14	100
16	70
17	30
18	0
24	

Starting Month: JAN Ending Month: DEC Starting Day Type: SAT Ending Day Type: SUN

```
Hour Util Percent

0 0
24
```

Schedule Name: AVAIL
Project: AVAILABLE (100)

Location: Client: Program Use

Program User: Comments:

Starting Month: JAN Ending Month: HTG Starting Day Type: DSGN Ending Day Type: SUN

Hour Util Percent
0 100
24

Schedule Name: CLG

Project: COOLING TSTAT SCHEDULE

Location: Client: Program User: Comments:

Starting Month: JAN Ending Month: DEC Starting Day Type: DSGN Ending Day Type: SUN

Hour Temperature
0 76
24

```
Schedule Name: CLGC
```

Project: COOLING COIL SCHEDULE

Location: Client:

Program User: R. GERRANS

Comments:

Starting Month: JAN Ending Month: APR Starting Day Type: DSGN Ending Day Type: SUN

Hour Util Percent
O 0

24

Starting Month: MAY Ending Month: OCT Starting Day Type: DSGN Ending Day Type: SUN

Hour Util Percent
--- 0 100
24

Starting Month: NOV Ending Month: HTG Starting Day Type: DSGN Ending Day Type: SUN

Hour Util Percent
O 0
24

Schedule Name: G1013EQ

Project: G101 3RD FLOOR EQUIPMENT SCHEDU

Location: Client: Program User: Comments:

Starting Month: JAN Ending Month: DEC

Starting Day Type: DSGN Ending Day Type: WKDY

Hour	Util Percent
0	20
7	80
8	100
12	80
13	100
16	80
17	40
18	20
24	

Starting Month: JAN Ending Month: DEC Starting Day Type: SAT Ending Day Type: SUN

Hour	Util	Percent
0		20
24		

Schedule Name: G1013LGT

Project: G101 3RD FLOOR LIGHTING SCHEDU

Location: Client: Program User: Comments:

Starting Month: JAN Ending Month: DEC Starting Day Type: DSGN Ending Day Type: WKDY

Hour Util Percent

8 100 12 80 13 100 16 80

80

24

0

Starting Month: JAN Ending Month: DEC Starting Day Type: SAT Ending Day Type: SUN

Hour Util Percent
--- 0 80
24

Schedule Name: G1013PPL

Project: G101 3RD FLOOR PEOPLE SCHEDULE

Location:

Client:

Program User: D JONES

Comments: OFFICE PEOPLE SCHEDULE

Starting Month: JAN Ending Month: DEC

Starting Day Type: DSGN Ending Day Type: WKDY

Hour Util Percent ----0 5 7 50 100 8 80 40 11 12 13 80 100 14 16 70 17 30 5 18 24

Starting Month: JAN Ending Month: DEC Starting Day Type: SAT Ending Day Type: SUN

Hour Util Percent

0 5
24

```
Schedule Name: HTG
Project: HEATING TSTAT SCHEDULE
Location:
Client:
Program User:
Comments:
Starting Month: JAN Ending Month: DEC
Starting Day Type: DSGN Ending Day Type: SUN
Hour Temperature
----
 0
       72
 24
Schedule Name: HTGC
Project: HEATING COIL SCHEDULE
Location:
Client:
Program User: R. GERRANS
Comments:
Starting Month: JAN Ending Month: APR
Starting Day Type: DSGN Ending Day Type: SUN
Hour Util Percent
 0
     100
 24
Starting Month: MAY Ending Month: OCT
Starting Day Type: DSGN Ending Day Type: SUN
Hour Util Percent
----
 0
     0
Starting Month: NOV Ending Month: HTG
Starting Day Type: DSGN Ending Day Type: SUN
Hour Util Percent
____
 0
       100
 24
Schedule Name: OFF
Project: ALWAYS OFF
Location:
Client:
Program User:
Comments:
Starting Month: JAN Ending Month: HTG
Starting Day Type: DSGN Ending Day Type: SUN
Hour Util Percent
  0
        0
 24
```



FT MCPHERSON & FT GILLEM EEAP FT GILLEM, BLDG 101

Time/Date Program was Run:

Dataset Name:

R. GERRANS

Weather File Code:	ATLANTA.	
Location:	ATLANTA, GEORGIA	A
Latitude:	33.0 (deg)	
Longitude:	84.0 (deg)	
Time Zone:	6	
Elevation:	1,005 (ft)	
Barometric Pressure:	28.8 (in. Hg)	
Summer Clearness Number:	0.90	
Winter Clearness Number:	0.90	
Summer Design Dry Bulb:	92 (F)	
Summer Design Wet Bulb:	74 (F)	
Winter Design Dry Bulb:	22 (F)	
Summer Ground Relectance:	0.20	
Winter Ground Relectance:	0.20	
Air Density:	0.0731 (Lbm/cuft	t)
Air Specific Heat:	0.2444 (Btu/lbm/	/F)
Density-Specific Heat Prod:	1.0727 (Btu-min.	/hr/cuft/F)
Latent Heat Factor:	4,721.8 (Btu-min.	/hr/cuft)
Enthalpy Factor:	4.3883 (Lb-min.,	hr/cuft)
Design Simulation Period: May	To October	
System Simulation Period: Janu	ary To December	
Cooling Load Methodology:	TETD/Time Averaging	ng

13:26:13 4/ 7/92

G101-B .TM

AIRFLOW - ALTERNATIVE 1 BLDG G101, BASELINE

----- SYSTEM SUMMARY ------ (Design Airflow Quantities)

				Main			Auxil.	Room
		Outside	Cooling	Heating	Return	Exhaust	Supply	Exhaust
System	System	Airflow						
Number	Type	(Cfm)						
1	sz	2,123	21,228	21,228	21,228	2,123	0	0
2	FC	0	11,285	11,285	13,337	2,052	0	0
3	SZ	1,130	11,305	11,305	11,305	1,130	0	0
4	FC	0	29,327	29,327	33,443	4,116	0	0
5	FC	0	44,831	44,831	50,652	5,821	0	0
6	sz	2,445	24,447	24,447	24,447	2,445	0	0
Totals		5,698	142,422	142,422	154,411	17,687	0	0

CAPACITY - ALTERNATIVE 1 BLDG G101, BASELINE

			Coo	ling					Heating			
		Main Sys.	Aux. Sys.	Opt. Vent	Cooling	Main Sys.	Aux. Sys.	Preheat	Reheat	Humidif.	Opt. Vent	Heating
System	System	Capacity	Capacity	Capacity	Totals	Capacity	Capacity	Capacity	Capacity	Capacity	Capacity	Totals
Number	Type	(Tons)	(Tons)	(Tons)	(Tons)	(Btuh)	(Btuh)	(Btuh)	(Btuh)	(Btuh)	(Btuh)	(Btuh)
1	sz	35.8	0.0	0.0	35.8	-238,028	0	0	0	0	0	-238,028
2	FC	21.5	0.0	0.0	21.5	-207,119	0	0	0	0	0	-207,119
3	sz	20.0	0.0	0.0	20.0	-82,461	0	0	0	0	0	-82,461
4	FC	48.9	0.0	0.0	48.9	-393,153	0	0	0	0	0	-393,153
5	FC	75.8	0.0	0.0	75.8	-553,725	0	0	0	0	0	-553,725
6	sz	41.2	0.0	0.0	41.2	-249,438	0	0	0	0	0	-249,438
Totals		243.1	0.0	0.0	243.1	-1,723,924	0	0	0	0	0	-1,723,924

The building peaked at hour 15 month 8 with a capacity of 243.0 tons

V 600 PAGE

ENGINEERING CHECKS - ALTERNATIVE 1 BLDG G101, BASELINE

R	N	æ	т	N	F	F	ъ	т	M	C	С	п	r.	~	¥	Q	

			Percent		Cool:	lng		Heat	ing	
System Number	Main/ Auxiliary	System Type	Outside Air	Cfm/ Sq Ft	Cfm/ Ton	Sq Ft /Ton	Btuh/ Sq Ft	Cfm/ Sq Ft	Btuh/ Sq Ft	Floor Area Sq Ft
1	Main	SZ	10.00	1.03	592.8	578.0	20.76	1.03	-11.50	20,697
2	Main	FC	0.00	1.10	525.1	477.4	25.14	1.10	-20.19	10,260
3	Main	SZ	10.00	1.08	565.1	521.6	23.00	1.08	-7.90	10,435
4	Main	FC	0.00	1.43	599.5	420.7	28.52	1.43	-19.10	20,580
5	Main	FC	0.00	1.54	591.6	384.1	31.24	1.54	-19.03	29,105
6	Main	sz	10.00	0.84	594.0	707.2	16.97	0.84	-8.57	29,105

System 1 Peak SZ - SINGLE ZONE

*****	******	***** CC	OOLING COIL	PEAK *****	******	****	*****	*** CLG	SPACE E	EAK *****	***** HEA	TING COIL P	EAK *	*****
	t Time ==>			8/15			*			6/16	*	Mo/Hr:		
Outside A	Air ==>	OAI	OB/WB/HR:	92/ 74/105.0)		*	ο.	ADB:	96	*	OADB:	•	
							*				*			
		Space	Ret. Air	Ret. Air	Net	Percr	ıt *	Spa	ce	Percnt *	Space Pea	k Coil P	eak	Percnt
	Se	ens.+Lat.	Sensible	Latent	Total	Of To	ot *	Sensi	ble	Of Tot *	Space Ser	ns Tot S	ens	Of Tot
Envelope	Loads	(Btuh)	(Btuh)	(Btuh)	(Btuh)	(9	3) *	(Bt	uh)	(*)	(Btul	1) (Bt	uh)	(%)
Skylite	e Solr	Ó	Ò		Ò			,	Ó	0.00 *		o `	ó	0.00
Skylite	e Cond	0	0		0	0.0	00 *		0	0.00 *		0	0	0.00
Roof Co		0	0		0	0.0)O *		0	0.00 *		0	0	0.00
Glass S		45,752	0		45,752	10.6	55 *	50,	800	16.24 *		0	0	0.00
Glass (19,078	0		19,078		4 *	22,9		7.45 *	-64,37	72 -64,	372	27.04
Wall Co		34,427	10,006		44,433			41,0		13.32 *	-58,75	•		31.86
Partit		0	20,000		0			,	0	0.00 *	,	0	0	0.00
	d Floor	0			ō		-		ō	0.00 *	-21,7	-	-	9.12
Infilt		0			0				0	0.00 *	44,77	0	0	0.00
			10,006		109,263		3 *	113,9	-	37.02 *	-144,83	-		68.02
Sub Tot		99,257	10,006		109,263	23.4		113,	933	37.02	-144,0.	o -101,	312	00.02
Internal			_		44 555					13.41 *	•	•	_	
Lights		41,297	0		41,297		1 *	41,				0	0	0.00
People		29,700			29,700		1 *	16,		5.36 *		0	0	0.00
Misc		124,182	0	0	124,182			124,		40.34 *		0	0	0.00
Sub Tot	tal==>	195,179	0	0	195,179			181,		59.11 *		0	0	0.00
Ceiling I	Load	10,006	-10,006		0			11,		3.87 *	-17,0		0	0.00
Outside A	Air	0	0	0	87,507	20.3	37 *		0	0.00 *		0 -113,		47.83
Sup. Fan	Heat				37,739	8.7	78 *			0.00 *		37,	739	-15.85
Ret. Fan	Heat		0		0	0.0	00 *			0.00 *			0	0.00
Duct Heat	t Pkup		0		0	0.0	00 *			0.00 *			0	0.00
OV/UNDR S	Sizing	0			0	0.0	00 *		0	0.00 *		0 .	0	0.00
Exhaust H	Heat		0	0	0	0.0)O *			0.00 *			0	0.00
Terminal	Bypass		0	0	0	0.0	00 *			0.00 *			0	0.00
Grand Tot	+=1==>	304,442	0	0	429,688	100.0	* 00 *	307,8	353	100.00 *	* -161,9:	12 -238,	.028	100.00
Grand 10	cai>	304,442	•	J	425,000	100.0		307,						
				LING COIL SE										
		Capacity	Sens Cap.			ing DB/				/WB/HR	Gross To		188 (8	f) (%)
	(Tons)	(Mbh)	(Mbh)	(cfm)	-	-	Frains	Deg F	_	Grains	Floor	20,697		
Main Clg	35.8	429.7	366.1	21,228	77.6	64.5	73.3	60.8	57.9		Part	0		
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	ExFlr	700		
Opt Vent	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Roof	0		0
Totals	35.8	429.7									Wall	7,205	1,0	64 15
	HEATING	COIL SELE	CTION		-	RFLOWS	(cfm)-		EI	NGINEERING	CHECKS	TEMPERA	ATURES	(F)
	Capacity			Lvg	Type	Cooli	ng 1	Heating	Clo	* OA	10.0	Type	Clg	Htg
	(Mbh)	(cfi		•	Vent	2,12	23	2,123	Clg	Cfm/Sqft	1.03	SADB	62.5	79.1
Main Htg	-238.0	•	,	•	Infil		0	. 0	Clg	Cfm/Ton	592.84	Plenum	77.5	69.4
Aux Htg	0.0	· · · · · · · · · · · · · · · · · · ·	0 0.0		Supply	21,22		21,228	-	Sqft/Ton	578.01	Return	76.0	72.0
Preheat	-0.0				Mincfm	-	0	0	_	Btuh/Sqft	20.76	Ret/OA	77.6	
Reheat	0.0	•	0 0.0		Return	21,22	-	21,228	_	People	66	Runarnd	76.0	
Humidif	0.0		0 0.0		Exhaust	2,12		2,123		% CA	10.0	Fn MtrTD	0.4	0.0
Opt Vent	0.0		0 0.0		Rm Exh	-,	0	0	-	Cfm/SqFt	1.03	Fn BldTD	0.3	
-			5 0.0		Auxil		0	0	_	Btuh/SqFt	-11.50	Fn Frict	0.9	
Total	-238.0	,		£	3MVTT		J	J	uug	-cuir our t	44.00		0.5	

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System 2 Block FC - FAN COIL

reaked a	it Time =	=>	Mo/Hr:	PEAK ***** 8/15			*		/Hr:	6/15	*		/Hr: 13/		
Outside	Air ==>	OA	DB/WB/HR:	92/ 74/105.	0		*		ADB:	96	*		ADB: 22	•	
		Space	Ret. Air	Ret. Air	Net	Percnt	. *	r cr	ace	Percnt '	* Space:	Peak C	oil Peak	_	
		Sens.+Lat.	Sensible		Total	Of Tot	*	Sensi		Of Tot		_	Tot Sens		ercnt of Tot
Envelope	Loads	(Btuh)	(Btuh)	(Btuh)	(Btuh)	(%)	*		uh)	(%)		tuh)	(Btuh)		(\$)
Skylit	e Solr	Ö	Ö		ì			, – -	ó	0.00	, , , , , , , , , , , , , , , , , , , ,	0	(Bean)		0.00
Skylit	e Cond	0	0		0	0.00	*		0	0.00	:	ō	0		0.00
Roof C	ond	0	0		0	0.00	*		0	0.00	•	ō	0		0.00
Glass	Solar	39,480	0		39,480	15.31	*	36,	120	17.38	•	Ö	0		0.00
Glass	Cond	15,061	0		15,061	5.84	*	18,		8.98	-50	,820	-50,820		24.54
Wall C	ond	18,185	5,892		24,077	9.34	*	18,	973	9.13		,150	-37,270		17.99
Partit	ion	0			0	0.00	*	Ť	0	0.00	,	0	0.,		0.00
Expose	d Floor	0			0	0.00	*		0	0.00 *	-11	,982	-11,982		5.78
Infilt	ration	84,589			84,589		*	44,		21.39 *			-110,057		53.14
Sub To	tal==>	157,315	5,892		163,207		*	118,		56.88 *		•	-210,129		.01.45
Internal	Loads				,		*	,			*	,	,	-	.01.43
Lights		43,686	0		43,686	16.94	*	43,	686	21.02		0	o	ı	0.00
People	ı	16,200			16,200		*		000	4.33		ō	o		0.00
Misc		30,780	0	0	30,780	11.94	*	30,		14.81		ō	0		0.00
Sub To	tal==>	90,666	0	0	90,666			83,		40.16		0	0		0.00
Ceiling	Load	5,892	-5,892		0	0.00	*	-	147	2.96	-9	,120	0		0.00
Outside .		0	0	0	0	0.00	*	٠,٠	0	0.00	-	0	0		0.00
Sup. Fan	Heat				3,009	1.17	*		_	0.00 *		_	3,009		-1.45
Ret. Fan	Heat		1,003		1,003	0.39	*			0.00			0,000		0.00
Duct Hea	t Pkup		. 0		, o	0.00	*			0.00 *			0		0.00
OV/UNDR	Sizing	0			0	0.00	*		0	0.00 *		0	ō		0.00
Exhaust	Heat		0	0	0	0.00	*			0.00 *			0		0.00
Terminal	Bypass		0	0	0	-0.00	*			0.00 *			Ö		0.00
							*				*				
Grand To	tal==>	253,873	1,003	0	257,885	100.00	*	207,8	334	100.00 *	-210	129 -	-207,119	1	.od
				LING COIL SE	LECTION							ARI	:AS		
		Capacity	Sens Cap.	Coil Airfl		ng DB/WB			-	B/WB/HR	Gross 1		Glass	(sf)	(%)
	(Tons)	(Mbh)	(Mbh)	(cfm)	Deg F De	-		-	_		Floor	10,26	50		
Main Clg	21.5	257.9	202.0	11,285			9.8		55.0		Part		0		
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	ExFlr	38	37		
Opt Vent	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.	0.0	Roof		0		0
)															
[otals	21.5	257.9									Wall	3,865		840	22
		G COIL SELE			AI	•	•			NGINEERING			PERATUR		•
	Capacit	-		Lvg	Туре	Cooling		Heating		g % OA	0.0	-	• •	lg	Htg
	(Mbh)	•		•	Vent	0		0	-	Cfm/Sqft	1.10	SADB	58		89.4
Main Htg	-207.	•			Infil	2,052		2,052	-	Cfm/Ton	525.12	Plen			69.2
Aux Htg	0.		0 0.0		Supply	11,285		11,285	_	Sqft/Ton	477.42	Retu			72.0
Preheat	-0.	•			Mincfm	0		0	-	Btuh/Sqft		Ret/C			72.0
Reheat	0.		0.0		Return	11,285		11,285		People	36	Runa			72.0
Humidif	0.		0 0.0		Exhaust	0		0	-	% OA	0.0	Fn Mi		. 1	0.0
Opt Vent	0.		0.0		Rm Exh	0		0	_	Cfm/SqFt	1.10	Fn B		.1	0.0
[otal	-207.	1		i	Auxil	0		0	Hta	Btuh/SqFt	-20.19	Fn Fr	rict 0	. 2	0.0

System 3 Peak SZ - SINGLE ZONE

Peaked a	t Time ==	=>	Mo/Hr:	8/15			*	Mo.	/Hr:	6/16	*		Mo/Hr:	13/ 1	*****
Outside .	Air ==>	OA	DB/WB/HR:	92/ 74/105.	0		*	O	ADB:	96	*			22	
		Space	Ret. Air	Ret. Air	Net	Percn	*	Spa		Percnt	*	Space Peak	Coil F	n1_	D
	8	Sens.+Lat.	Sensible		Total			Sensi)		Of Tot	*	Space Sens	Tot S		Percnt Of Tot
Envelope		(Btuh)	(Btuh)	(Btuh)	(Btuh)	(%		(Bti			*	(Btuh)		tuh)	(%)
Skylit		Ò	` ó	, ,	(,	•	•	(0		*	(,	(2)	0	0.00
Skylit	e Cond	0	0		0	0.0	0 *		0	0.00	*	0		ō	0.00
Roof C	ond	0	0		0	0.0	0 *		0	0.00	*	Ō		ō	0.00
Glass :	Solar	2,800	0		2,800	1.1	7 *	2,5	520	1.51	*	0		0	0.00
Glass (Cond	2,510	0		2,510	1.0	5 *	3,0	18	1.81	*	-8,470	-8,	,470	10.27
Wall Co	ond	16,683	4,262		20,944	8.7	3 *	18,7	62	11.22	*	-26,650	-33,	, 458	40.57
Partit:	ion	0			0	0.0	0 *		0	0.00	*	0	•	0	0.00
Expose	d Floor	0			0	0.0	0 *		0	0.00	*	0		0	0.00
Infilt:	ration	0			0	0.0	0 *		0	0.00	*	0		0	0.00
Sub To	tal==>	21,993	4,262		26,255	10.9	4 *	24,3	100	14.53	*	-35,120	-41,	,928	50.85
Internal	Loads						*				*				
Lights		64,233	0		64,233	26.7	6 *	64,2	233	38.42	*	0		0	0.00
People		20,250			20,250	8.4	4 *	11,2	250	6.73	*	0		0	0.00
Misc		62,608	0	0	62,608	26.0	8 *	62,6	808	37.45	*	0		0	0.00
Sub To	tal==>	147,090	0	0	147,090	61.2	8 *	138,0	90	82.60	*	0		0	0.00
Ceiling 1	Load	4,262	-4,262		0	0.0	0 *	4,7	793	2.87	*	-6,808		0	0.00
Outside A	Air	0	0	0	46,600	19.4	1 *		0	0.00	*	0	-60,	,631	73.53
Sup. Fan					20,097	8.3	7 *			0.00	*		20,	,097	-24.37
Ret. Fan			0		0		0 *			0.00	*			0	0.00
Duct Heat	-		0		0					0.00	*			0	0.00
OV/UNDR 8	_	0			0		0 *		0	0.00	*	0		0	0.00
Exhaust I			0	0	0					0.00	*			0	0.00
Terminal	Bypass		0	0	0	0.0	0 *			0.00	* +			0	0.00
Grand To	tal==>	173,345	0	0	240,042	100.0	0 *	167,1	.83	100.00	*	-41,928	-82,	,461	100.00
			coc	LING COIL SE	LECTION								-AREAS		
	Total	Capacity	Sens Cap.	Coil Airfl	Enter	ing DB/V	WB/HIR	Leav	ing D	B/WB/HR		Gross Total	i Gla	ass (s	sf) (%)
	(Tons)	(Mbh)	(Mbh)	(cfm)	Deg F D	eg F G	rains	Deg F	Deg I	F Grains		Floor 1	.0,435		
Main Clg	20.0	240.0	204.2	11,305	77.6	64.5	73.3	60.6	57.6	69.1		Part	0		
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0		ExFlr	0		
Opt Vent O	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.	0.0	1	Roof	0		0
Totals 5	20.0	240.0										Wall	2,840		140
	HEATIN	G COIL SELE	ECTION		AI	RFLOWS	(cfm)-		E	ENGINEERIN	G C	HECKS	-TEMPERA	ATURES	5 (F)
	Capacit	y Coil A	irfl Ent	Lvg	Type	Coolir	ng I	Heating	Cl	g % OA		10.0	Type	Clg	Htg
	(Mbh)	(cfm	n) Deg F	Deg F	Vent	1,13	0	1,130	Clg	Cfm/Sqft		1.08	SADB	62.2	75.5
Main Htg	-82.	5 11,3	05 67.0	73.8	Infil		0	0	Clg	Cfm/Ton		565.13 P	lenum	77.3	69.9
Aux Htg	0.	0	0.0	0.0	Supply	11,30	5	11,305	Clg	Sqft/Ton		521.64 F	Return	76.0	72.0
Preheat	-0.	0 11,3	05 67.0	60.6	Mincfm	1	0	0	Clg	Btuh/Sqf	t	23.00 F	Ret/OA	77.6	67.0
Reheat	0.	0	0.0	0.0	Return	11,30	5	11,305	No.	People		45 F	Runarnd	76.0	72.0
Humidif	0.	0	0.0	0.0	Exhaust	1,13	0	1,130	Htg	* OA		10.0 F	n MtrTD	0.4	0.0
Opt Vent	0.	0	0.0	0.0	Rm Exh	1	0	0	Htg	Cfm/SqFt		1.08 F	n BldTD	0.3	0.0
Total	-82.	5			Auxil		0	0	Hta	Btuh/SqF	+	-7.90 F	n Frict	0.9	0.0

System 4 Block FC - FAN COIL



Peaked a	it Time =		Mo/Hr:	8/15			*		o/Hr:	6/16	*		Mo/Hr:		
Outside	Air ==>	OA	DB/WB/HR:	92/ 74/105.	0		*	(DADB:	96	*		OADB:	22	
		Space	Ret. Air	Ret. Air	Ne	t Percn	+ *	g,	ace	Percnt	* Sn=/	ce Peak	0-41 8		
		Sens.+Lat.	Sensible		Tota			Sensi		Of Tot		ce Sens	Coil F		Percnt
Envelope	Loads	(Btuh)	(Btuh)	(Btuh)	(Btuh				cuh)		*	(Btuh)		uh)	(%)
Skylit	e Solr	0	Ó	, ,	Ì		•	,	Ó		*	0	(100	0	0.00
Skylit	e Cond	0	0		C	0.0	0 *		0		*	0		ō	0.00
Roof C	ond	0	0		(0.0	0 *		0	0.00	*	ō		ō	0.00
Glass	Solar	93,492	0		93,492	15.9	3 *	88,	200	18.12	*	0		0	0.00
Glass	Cond	31,629	0		31,629	5.3	9 *	38,	032	7.82	• -1	106,722	-106,	722	27.15
Wall C	ond	33,260	10,983		44,243	7.5	4 *	39,	338	8.08	٠ .	-55,250	-73,	494	18.69
Partit	ion	0			C	0.0	C *		0	0.00	*	0	-	0	0.00
Expose	d Floor	0			C	0.0	0 *		0	0.00	*	0		0	0.00
Infilt	ration	169,672			169,672	28.9	1 *	86,	537	17.78	· -2	220,757	-220,	757	56.15
Sub To	tal==>	328,053	10,983		339,036	57.7	6 *	252,	107	51.81	• -3	82,729	-400,	973	101.99
Internal	Loads						*	·			*	•	•		
Lights		119,216	0		119,216	20.3	1 *	119,	216	24.50	*	0		0	0.00
People		36,000			36,000	6.1	3 *	20,	000	4.11	*	0		0	0.00
Misc		82,320	0	0	82,320	14.0	2 *	82,	320	16.92	*	0		0	0.00
Sub To	tal==>	237,536	0	0	237,536	40.4	7 *	221,	536	45.52	*	0		0	0.00
Ceiling :	Load	10,983	-10,983		O	0.0	0 *	12,	989	2.67	٠ .	-18,244		0	0.00
Outside .	Air	0	0	0	C	0.0	0 *		0	0.00	*	0		0	0.00
Sup. Fan	Heat				7,820	1.3	3 *			0.00	*		7,	820	-1.99
Ret. Fan	Heat		2,607		2,607	0.4	4 *			0.00	k .			0	0.00
Duct Hea	-		0		a	0.0	0 *			0.00	*			0	0.00
OV/UNDR	-	0			0	0.0	0 *		0	0.00	t	0		0	0.00
Exhaust 1			0	0	0	0.0	0 *			0.00	t .			0	0.00
Terminal	Bypass		0	0	C	-0.0	0 *			0.00	*			0	0.00
Grand To	tal==>	576,572	2,607	0	586,999	100.00	o *	486,	632	100.00	-4	100,973	-393,	153	10
			coo	LING COIL SE	LECTION								AREAS		
	Total	Capacity	Sens Cap.	Coil Airfl	Enter	ing DB/W	/B/HR	Leav	ving D	B/WB/HR		s Total			E) (%)
	(Tons)	(Mbh)	(Mbh)	(cfm)	Deg F D	eg F G	rains	Deg F	Deg I	F Grains	Floo	r 20	,580		
Main Clg	48.9	587.0	473.3	29,327	76.1	63.2	69.8	60.3	56.6	65.2	Part		0		
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	ExF1	r	0		
opt Vent)	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.	0.0	Roo	f	0		0
Cotals	48.9	587.0									Wall	7,7	30	1,76	54 23
	HEATIN	NG COIL SELE	CTION		AI	RFLOWS	(cfm)-		E	NGINEERIN	CHECKS	3	TEMPERA	TURES	(F)
	Capacit	ty Coil Ai	rfl Ent	Lvg	Type	Coolin	ig :	Heating	Cl	g % OA		0.0	Type	Clg	Htg
	(Mbh)) (cfm) Deg F	Deg F	Vent	(0	0	Clg	Cfm/Sqft	1.	.43 SZ	DB	60.5	84.7
Main Htg	-393.	•			Infil	4,116	5	4,116	Clg	Cfm/Ton	599.	.52 P3	enum	77.7	69.2
lux Htg	0.		0.0	0.0	Supply	29,327	,	29,327	Clg	Sqft/Ton	420.	72 Re	turn	76.0	72.0
Preheat	-0.	.0 29,3		60.5	Mincfm	(כ	0	Clg	Btuh/Sqft	28.	52 Re	t/OA	76.0	72.0
Reheat	0.		0.0		Return	29,327		29,327		People			narnd	76.0	72.0
lumidif	0.		0.0		Exhaust		כ	0	Htg	AO &	0	.0 Fr	MtrTD	0.1	0.0
pt Vent	0.		0.0		Rm Exh	C)	0	•	Cfm/SqFt		43 Fr	BldTD	0.1	0.0
otal	-393.				Auxil	a		0		Btuh/SqFt	-19.		Frict	0.2	0.0

System 5 Block FC - FAN COIL

Peaked at Ti			Mo/Hr:	8/15			*		•	6/16	*		Mo/Hr:		
Outside Air	==>	OAI	OB/WB/HR:	92/ 74/105.0	ס		*	0.	ADB:	96	*		OADB:	22	
		Space	Ret. Air	Ret. Air	Net	Perc	nt *	Spa	100	Percnt	*	Space Pea	k Coil P	eak I	Percnt
	S	ens.+Lat.	Sensible		Total			Sensi		Of Tot	*	Space Ser			Of Tot
Envelope Loa		(Btuh)	(Btuh)		(Btuh)	(1	8) *	(Bt	uh)	(%)	*	- (Btul			(%)
Skylite Sc		Ò	Ò		Ò	•	•	•	ó	0.00	*	•	ó	ó	0.00
Skylite Co		0	0		0	0.0	oo *		0	0.00	*		0	0	0.00
Roof Cond		0	0		o	0.0	00 *		0	0.00	*		0	0	0.00
Glass Sola	ır	146,300	0		146,300	16.	09 *	146,	300	19.33	*		0	0	0.00
Glass Cond		47,694	0		47,694			57,			*	-160,93	-160,	930	29.06
Wall Cond	_	41,481	14,602		56,083		17 *	48,			*	-68,45		546	16.71
Partition		0	,		0				0	0.00	*			0	0.00
Exposed F	loor	ō			0				0	0.00	*		0	0	0.00
Infiltrati		239,957			239,957			122,	-	16.17	*	-312,20	3 -312,	203	56.38
Sub Total=		475,431	14,602		490,033		89 *	374,		49.52	*	-541,58			102.16
Internal Loa		4/3,431	14,002		450,055		*	3.4,		45.00	*	0 12,01	,		
Lights	lub	200,480	0		200,480	22.0	05 *	200,	480	26.49	*		0	0	0.00
People		86,400	J		86,400		50 *	48,		6.34	*		ō	ō	0.00
Misc		-	0	0	116,420			116,		15.38	*		ō	ō	0.00
Sub Total=		116,420 403,300	0	-	403,300		35 *	364,		48.21	*		ō	ō	0.00
		-	-14,602		403,300			17,		2.27	*	-24,0	-	ō	0.00
Ceiling Load	1	14,602 0	-14,602		0		• •	1,,	0	0.00	*	24,0	0	ō	0.00
Outside Air		U	U	U	11,955				Ū	0.00	*		_	955	-2.16
Sup. Fan Hea			3,985		3,985					0.00	*		,	0	0.00
Ret. Fan Hea			3,963		3,963					0.00	*			ō	0.00
Duct Heat Pi	•	0	U		0				0	0.00	*		0	Ö	0.00
OV/UNDR Sizi	-	U	0	0	0				·	0.00	*		•	ō	0.00
Exhaust Heat			0		0					0.00	*			ō	0.00
Terminal By	Dass		·	· ·		-0.	*			0.00	*			•	•
Grand Total	==>	893,333	3,985	0	909,273	100.	00 *	756,	826	100.00	*	-565,60	80 -553,	725	100.00
			co	OLING COIL SE	LECTION						-		AREAS		
7	Fotal	Capacity	Sens Cap.	Coil Airfl	Enter	ing DB/	WB/HR		_	3/WB/HR		Gross To		ss (sf	(%)
("	rons)	(Mbh)	(Mbh)	(cfm)	Deg F D	eg F	Grains	Deg F	Deg F	' Grains		Floor	29,105		
Main Clg	75.8	909.3	732.7	44,831	76.1	63.2	69.8	60.1	56.5	65.2		Part	0		
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0		ExFlr	0		
Opt Vent	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.	0 0.	0	Roof	0		0
Totals	75.8	909.3									W	all :	10,170	2,66	0 20
	HEATIN	G COIL SELI	ECTION		A	IRFLOWS	(cfm)-		E	NGINEERI	NG (THECKS	TEMPERA	TURES	(F)
	apacit			Lvg	Туре	Cooli		Heating	Cle	g % OA		0.0	Type	Clg	Ht
	(Mbh)	-	m) Deg E	P Deg F	Vent		0	0	Clg	Cfm/Sqf	t	1.54	SADB	60.3	83.
Main Htg	-553.	•		•	Infil	5,8	21	5,821	Clg	Cfm/Ton		591.65	Plenum	77.6	69.
Aux Htg	0.	•	0 0.0		Supply	44,8	31	44,831	Clg	Sqft/To	1	384.11	Return	76.0	72.
Preheat	-0.				Mincfm	•	0	. 0	Clg	Btuh/Sq	Ēt	31.24	Ret/OA	76.0	72.
Reheat	0.	•	0 0.0		Return	44,8	31	44,831	-	People		192	Runarnd	76.0	72.
Humidif	0.		0 0.0		Exhaust	•	0	0		% OA		0.0	Fn MtrTD	0.1	0.
			0 0.0				0	0	_	Cfm/SqF		1.54	Fn BldTD	0.1	0.
Opt Vent	0.	U	0 0-0	0.0	Rm Exh		Ų	U	D.C.Q	CIM/DGF	•	T.34	LII DIGID		

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- SINGLE ZONE System Peak Mo/Hr: 6/16 * Peaked at Time ==> Mo/Hr: 7/15 Mo/Hr: 13/ 1 OADB/WB/HR: 92/ 74/105.0 Outside Air ==> OADB: 96 OADB: 22 Percnt * Space Peak Coil Peak Percnt Net Percnt * Space Ret. Air Ret. Air Space Total Of Tot * Of Tot * Of Tot Sens.+Lat. Sensible Latent Sensible Space Sens Tot Sens (%) * (%) * Envelope Loads (Btuh) (Btuh) (Btuh) (Btuh) (Btuh) (Btuh) (శ) (Btuh) 0.00 * 0.00 * Skylite Solr 0 0 0 O 0 0 0.00 Skylite Cond 0 0 0 0.00 * 0 0.00 * 0 0 0.00 57,062 11.55 * Roof Cond 0 57,062 0.00 * 0 -37,969 15.22 0 0.00 * 0.00 * Glass Solar 0 0 0 0 0 0 0.00 Glass Cond 0 0 0 0.00 ٥ 0.00 * 0 0 0.00 14.83 * 20.41 * Wall Cond 73.251 61,630 11.620 72,410 -101,700 -123,812 49.64 0 0 Partition 0 ۵ 0.00 * 0.00 * 0 0.00 Exposed Floor 0 0 0.00 * 0 0.00 * 0 0.00 0 Infiltration 0 0 0.00 * 0 0.00 * 0 O 0.00 130,313 26.39 * 20.41 * 68,683 -101,700 Sub Total ==> 61.630 72,410 -161,781 64.86 Internal Loads Lights 98,124 19.87 * 27.66 * 98,124 0 98,124 0 0 0.00 People 34,650 34,650 7.02 * 19,250 5.43 * 0 0 0.00 87,315 24.61 * Misc 87,315 0 17.68 * 87,315 0 0 0.00 0 44.57 * 57.69 * Sub Total ==> 220,089 0 0 220,089 204,689 0 ۵ 0.00 68,683 21.90 * Ceiling Load -68,683 0 0.00 * 77,709 -60,081 0 0.00 0.00 * -131,118 20.25 * Outside Air 0 0 O 99,989 0 0 52.57 Sup. Fan Heat 43,461 8.80 * 0.00 * 43,461 Ret. Fan Heat 0.00 0 0.00 * 0.00 0 0 0.00 * Duct Heat Pkup 0 0 0.00 * Ω 0.00 OV/UNDR Sizing 0 0.00 0.00 * 0.00 0.00 0.00 0 0.00 O Exhaust Heat 0 0 Terminal Bypass 0 0 0 0.00 0.00 0 0.00 100.00 * 493,852 100.00 * -161,781 -249,438 Grand Total ==> 350,402 0 0 354,808 -----AREAS-----Total Capacity Sens Cap. Coil Airfl Entering DB/WB/HR Leaving DB/WB/HR Gross Total Glass (sf) (%) Deg F Deg F Grains Floor 29,105 (Mbh) (cfm) Deg F Deg F Grains (Mbh) (Tons) Main Clg 41.2 493.9 420.4 24,447 77.6 64.5 73.3 60.8 57.9 70.1 Part 0 Aux Clg 0.0 0 0.0 0.0 0.0 0.0 0.0 0.0 ExFlr 0 0.0 0.0 0.0 0.0 Roof 29,105 0 Opt Vent 0.0 0.0 0.0 ۵ 0.0 0.0 0.0 0.0 0 Wall 10,170 0 41.2 493.9 Totals

Ü												
	HEATING C	OIL SELECTION	N		A	IRFLOWS (cf	m)	ENGINEERING	CHECKS	TEMPERA	TURES	(F)
	Capacity	Coil Airfl	Ent	Lvg	Type	Cooling	Heating	Clg % OA	10.0	Туре	Clg	Htg
	(Mbh)	(cfm)	Deg F	Deg F	Vent	2,445	2,445	Clg Cfm/Sqft	0.84	SADB	62.5	78.2
Main Htg	-249.4	24,447	67.0	76.5	Infil	0	0	Clg Cfm/Ton	594.03	Plenum	83.4	65.5
Aux Htg	0.0	. 0	0.0	0.0	Supply	24,447	24,447	Clg Sqft/Ton	707.22	Return	76.0	72.0
Preheat	-0.0	24,447	67.0	60.8	Mincfm	0	0	Clg Btuh/Sqft	16.97	Ret/OA	77.6	67.0
Reheat	0.0	. 0	0.0	0.0	Return	24,447	24,447	No. People	77	Runarnd	76.0	72.0
Humidif	0.0	0	0.0	0.0	Exhaust	2,445	2,445	Htg % QA	10.0	Fn MtrTD	0.4	0.0
Opt Vent	0.0	0	0.0	0.0	Rm Exh	0	0	Htg Cfm/SqFt	0.84	Fn BldTD	0.3	0.0
Total	-249.4				Auxil	0	0	Htg Btuh/SqFt	-8.57	Fn Frict	0.9	0.0

MAIN SYSTEM COOLING - ALTERNATIVE 1 BLDG G101, BASELINE

------PEAK COOLING LOADS ------(Main System)

							-							
						Space	,					Coil		
		Peak	O.A.	Rm	Supp.	Space	Space	Space	Peak	OA RII	Supp.	Coil	Coil	Coil
		Time	Cond.	Dry	Dry	Air	Sens.	Lat.	Time	Cond. Dry	Dry	Air	Sens.	Lat.
Room		Mo/Hr	DB/WB	Blb	Bulb	Flow	Load	Load	Mo/Hr	DB/WB Blb	Bulb	Flow	Load	Load
Number	Description		(F)	(F)	(F)	(Cfm)	(Btuh)	(Btuh)		(F) (F)	(F)	(Cfm)	(Btuh)	(Btuh)
1	1ST FL AHU	6/16	96 72	76	62.5	21,228	307,853	13,200	8/15	92 74 76	63.2	21,228	366,097	63,591
Zone	1 Total/Ave	•	96 72	76	62.5	21,228	307,853	13,200		92 74 76	63.2	21,228	366,097	63,591
Zone	1 Block	6/16	96 72	76	62.5	21,228	307,853	13,200	8/15	92 74 76	63.2	21,228	366,097	63,591
System	1 Total/Ave		96 72	76	62.5	21,228	307,853	13,200		92 74 76	63.2	21,228	366,097	63,591
System	1 Block	6/16	96 72	76	62.5	21,228	307,853	13,200	8/15	92 74 76	63.2	21,228	366,097	63,591
2	1ST FL FC	6/15	96 73	76	58.8	11,285	207,834	36,532	8/15	92 74 76	59.6	11,285	201,975	55,910
Zone	2 Total/Ave		96 73	76	58.8	11,285	207,834	36,532		92 74 76	59.6	11,285	201,975	55,910
Zone	2 Block	6/15	96 73	76	58.8	11,285	207,834	36,532	8/15	92 74 76	59.6	11,285	201,975	55,910
System	2 Total/Ave		96 73	76	58.8	11,285	207,834	36,532		92 74 76	59.6	11,285	201,975	55,910
System	2 Block	6/15	96 73	76	58.8	11,285	207,834	36,532	8/15	92 74 76	59.6	11,285	201,975	55,910
3	2ND FL AHU	6/16	96 72	76	62.2	11,305	167,183	9,000	8/15	92 74 76	62.4	11,305	204,208	35,835
Zone	3 Total/Ave		96 72	76	62.2	11,305	167,183	9,000		92 74 76	62.4	11,305	204,208	35,835
Zone	3 Block	6/16	96 72	76	62.2	11,305	167,183	9,000	8/15	92 74 76	62.4	11,305	204,208	35,835
System	3 Total/Ave		96 72	76	62.2	11,305	167,183	9,000		92 74 76	62.4	11,305	204,208	35,835
System	3 Block	6/16	96 72	76	62.2	11,305	167,183	9,000	8/15	92 74 76	62.4	11,305	204,208	35,835
4	2ND FL FC	6/16	96 72	76	60.5	29,327	486,632	55,400	8/15	92 74 76	61.3	29,327	473,294	113,705
Zone	4 Total/Ave.		96 72	76	60.5	29,327	486,632	55,400		92 74 76	61.3	29,327	473,294	113,705
Zone	4 Block	6/16	96 72	76	60.5	29,327	486,632	55,400	8/15	92 74 76	61.3	29,327	473,294	113,705
System	4 Total/Ave		96 72	76	60.5	29,327	486,632	55,400		92 74 76	61.3	29,327	473,294	113,705
System	4 Block	6/16	96 72	76	60.5	29,327	486,632	55,400	8/15	92 74 76	61.3	29,327	473,294	113,705
5	3RD FL FC	6/16	96 72	76	60.3	44,831	756,826	94,121	8/15	92 74 76	61.1	44,831	732,695	176,578
Zone	5 Total/Ave		96 72	76	60.3	44,831	756,826	94,121		92 74 76	61.1	44,831	732,695	176,578
Zone	5 Block	6/16	96 72	76	60.3	44,831	756,826	94,121	8/15	92 74 76	61.1	44,831	732,695	176,578
System	5 Total/Ave.		96 72	76	60.3	44,831	756,826	94,121		92 74 76	61.1	44,831	732,695	176,578
System	5 Block	6/16	96 72	76	60.3	44,831	756,826	94,121	8/15	92 74 76	61.1	44,831	732,695	176,578
6	4TH FL AHU	6/16	96 72	76	62.5	24,447	354,808	15,400	7/15	92 74 76	63.2	24,447	420,420	73,431
Zone	6 Total/Ave		96 72	76	62.5	24,447	354,808	15,400		92 74 76	63.2	24,447	420,420	73,431
Zone	6 Block	6/16	96 72	76	62.5	24,447	354,808	15,400	7/15	92 74 76	63.2	24,447	420,420	73,431
System	6 Total/Ave		96 72	76	62.5	24,447	354,808	15,400		92 74 76	63.2	24,447	420,420	73,431
System	6 Block	6/16	96 72	76	62.5	24,447	354,808	15,400	7/15	92 74 76	63.2	24,447	420,420	73,431

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COOLING LOADS AT COIL PEAK - ALTERNATIVE 1 BLDG G101, BASELINE

(At time of Coil Peak)

				Ventilation		Opt:	ional Ventil	ation		Bypass		
Room			Airflow	ga151-		-1						Ov/Undr
Number		Description		Sensible		Airflow	Sensible		Airflow	Sensible	Latent	Sizing
ummer		Description	(Cfm)	(Btuh)	(Btuh)	(Cfm)	(Btuh)	(Btuh)	(Cfm)	(Btuh)	(Btuh)	(Btuh)
1	1ST F	L AHU	2,123	37,116	50,391	0	0	0	0	0	0	0
Zone	1	Total/Ave.	2,123	37,116	50,391	0	0	0	0	ō	ō	ō
Zone	1	Block	2,123	37,116	50,391	0	0	0	0	ō	o o	0
System	1	Total/Ave.	2,123	37,116	50,391	0	0	0	0	ō	ō	Ô
System	1	Block	2,123	37,116	50,391	0	0	0	0	ō	0	0
2	1ST F	L FC	0	0	. 0	0	0	0	0	ō	ō	ō
Zone	2	Total/Ave.	0	0	0	0	0	0	0	0	ō	Ô
Zone	2	Block	0	0	0	0	0	0	ō	ō	ō	Ô
System	2	Total/Ave.	0	0	0	0	0	0	ō	ō	ō	Ö
System	2	Block	0	0	0	0	0	0	0	0	0	ō
3	2ND F	L AHU	1,130	19,766	26,835	0	0	0	0	0	0	ō
Zone	3	Total/Ave.	1,130	19,766	26,835	0	0	0	0	0	Ō	Ö
Zone	3	Block	1,130	19,766	26,835	0	0	0	0	0	0	Ō
System	3	Total/Ave.	1,130	19,766	26,835	0	0	0	0	0	0	0
System	3	Block	1,130	19,766	26,835	0	0	0	0	0	0	0
4	2ND F	L FC	0	0	0	0	0	0	0	0	0	0
Zone	4	Total/Ave.	0	0	0	0	0	0	0	0	0	0
Zone	4	Block	0	0	0	0	0	0	0	0	0	0
System	4	Total/Ave.	0	0	0	0	0	0	0	0	0	0
System	4	Block	0	0	0	0	0	0	0	0	0	0
5	3RD F	L FC	0	0	0	0	0	0	0	0	0	
Zone	5	Total/Ave.	0	0	0	0	0	0	0	0	0	
Zone	5	Block	0	0	0	0	0	0	0	0	0	0
System	5	Total/Ave.	0	0	0	0	0	0	0	0	0	0
System	5	Block	0	0	0	0	0	0	0	0	0	0
6	4TH F	L AHU	2,445	41,958	58,031	0	0	0	0	0	0	0
Zone	6	Total/Ave.	2,445	41,958	58,031	0	0	0	0	0	0	0
Zone	6	Block	2,445	41,958	58,031	0	0	0	0	0	0	0
System	6	Total/Ave.	2,445	41,958	58,031	0	0	0	0	0	0	0
System	6	Block	2,445	41,958	58,031	0	0	0	0	0	0	0

HEATING LOADS AT COIL PEAK - ALTERNATIVE 1 BLDG G101, BASELINE

		Vent	ilation	Op.	Vent	Rei	heat	Hum:	idif	
Room		Airflow	Sensible		Sensible		Sensible		Latent	Total
Number	Description	(Cfm)	(Btuh)	(Cfm)	(Btuh)	(Cfm)	(Btuh)	(Cfm)	(Btuh)	(Btuh)
1	1ST FL AHU	2,123	-113,854	Ò	Ó	0	0	0	0	-113,854
Zone	1 Total/Ave.	2,123	-113,854	0	0	0	0	0	0	-113,854
Zone	1 Block	2,123	-113,854	0	0	0	0	0	0	-113,854
System	1 Total/Ave.	2,123	-113,854	0	0	0	0	0	0	-113,854
System	1 Block	2,123	-113,854	0	0	0	0	0	0	-113,854
- 2	1ST FL FC	0	0	0	0	0	0	0	0	0
Zone	2 Total/Ave.	0	0	0	0	0	0	0	0	0
Zone	2 Block	0	0	0	0	0	0	0	0	0
System	<pre>2 Total/Ave.</pre>	0	0	0	0	0	0	0	0	0
System	2 Block	0	0	0	0	0	0	0	0	0
3	2ND FL AHU	1,130	-60,631	0	0	0	0	0	0	-60,631
Zone	3 Total/Ave.	1,130	-60,631	0	0	0	0	0	0	-60,631
Zone	3 Block	1,130	-60,631	0	0	0	0	0	0	-60,631
System	3 Total/Ave.	1,130	-60,631	0	0	0	0	0	0	-60,631
System	3 Block	1,130	-60,631	0	0	0	0	0	0	-60,631
4	2ND FL FC	0	0	0	0	0	0	0	0	0
Zone	4 Total/Ave.	0	0	0	0	0	0	0	0	0
Zone	4 Block	0	0	0	0	0	0	0	0	0
System	4 Total/Ave.	0	0	0	0	0	0	0	0	0
System	4 Block	0	0	0	0	0	0	0	0	0
5	3RD FL FC	0	0	0	0	0	0	0	0	0
Zone	5 Total/Ave.	0	0	0	0	0	0	0	0	0
Zone	5 Block	0	0	0	0	0	0	0	0	0
System	5 Total/Ave.	0	0	0	0	0	0	0	0	0
System	5 Block	0	0	0	0	0	0	0	0	0
6	4TH FL AHU	2,445	-131,118	0	0	0	0	0	0	-131,118
Zone	6 Total/Ave.	2,445	-131,118	0	0	0	0	0	0	-131,118
Zone	6 Block	2,445	-131,118	0	0	0	0	0	0	-131,118
System	6 Total/Ave.	2,445	-131,118	0	0	0	0	0	0	-131,118
System	6 Block	2,445	-131,118	0	0	0	0	0	0	-131,118

MAIN SYSTEM HEATING - ALTERNATIVE 1 BLDG G101, BASELINE



-----PEAK HEATING LOADS ------(Main System)

						(Ma:	in System)							
						Space	,					Coil		
			Peak	Q	Rm	Supp.	Space	Space	Peak	Q	A Rm	Supp.	Coil	Coil
		Floor	Time	Cond	Dry	Dry	Air	Sens.	Time	Cond	Dry	Dry	Air	Sens.
Room	ı	Area	Mo/Hr	DB/WB	Blb	Bulb	Flow	Load	Mo/Hr	DB/W	Blb	Bulb	Flow	Load
Number	Description	(Sq Ft)		(F)	(F)	(F)	(Cfm)	(Btuh)		(F)	(F)	(F)	(Cfm)	(Btuh)
1	1ST FL AHU	20,697	13/ 1	22 1	3 72	79.1	21,228	-161,912	13/ 1	22 1	8 72	79.1	21,228	-238,028
Zone	<pre>1 Total/Ave.</pre>	20,697		22 1	72	79.1	21,228	-161,912		22 1	8 72	79.1	21,228	-23 8
Zone	1 Block	20,697	13/ 1	22 1	3 72	79.1	21,228	-161,912	13/ 1	22 1	8 72	79.1	21,228	-2 38
System	<pre>1 Total/Ave.</pre>	20,697		22 1	8 72	79.1	21,228	-161,912		22 1	8 72	79.1	21,228	-238 ·
System	1 Block	20,697	13/ 1	22 1	3 72	79.1	21,228	-161,912	13/ 1	22 1	8 72	79.1	21,228	-238,02a
2	1ST FL FC	10,260	13/ 1	22 1	3 72	89.4	11,285	-210,129	13/ 1	22 1	8 72	89.4	11,285	-207,119
Zone	2 Total/Ave.	10,260		22 1	3 72	89.4	11,285	-210,129		22 1	8 72	89.4	11,285	-207,119
Zone	2 Block	10,260	13/ 1	22 1	3 72	89.4	11,285	-210,129	13/ 1	22 1	8 72	89.4	11,285	-207,119
System	2 Total/Ave.	10,260		22 1	3 72	89.4	11,285	-210,129		22 1	8 72	89.4	11,285	-207,119
System	2 Block	10,260	13/ 1	22 1	3 72	89.4	11,285	-210,129	13/ 1	22 1	8 72	89.4	11,285	-207,119
3	2ND FL AHU	10,435	13/ 1	22 1	3 72	75.5	11,305	-41,928	13/ 1	22 1	8 72	75.5	11,305	-82,461
Zone	3 Total/Ave.	10,435		22 1	3 72	75.5	11,305	-41,928		22 1	8 72	75.5	11,305	-82,461
Zone	3 Block	10,435	13/ 1	22 1	3 72	75.5	11,305	-41,928	13/ 1	22 1	8 72	75.5	11,305	-82,461
System	3 Total/Ave.	10,435		22 1	3 72	75.5	11,305	-41,928		22 1	8 72	75.5	11,305	-82,461
System	3 Block	10,435	13/ 1	22 1	3 72	75.5	11,305	-41,928	13/ 1	22 1	8 72	75.5	11,305	-82,461
4	2ND FL FC	20,580	13/ 1	22 1	3 72	84.7	29,327	-400,973	13/ 1	22 1	8 72	84.7	29,327	-393,153
Zone	4 Total/Ave.	20,580		22 1	3 72	84.7	29,327	-400,973		22 1	8 72	84.7	29,327	-393,153
Zone	4 Block	20,580	13/ 1	22 1	72	84.7	29,327	-400,973	13/ 1	22 1	8 72	84.7	29,327	-393,153
System	4 Total/Ave.	20,580		22 1	72	84.7	29,327	-400,973		22 1	8 72	84.7	29,327	-393,153
System	4 Block	20,580	13/ 1	22 1	72	84.7	29,327	-400,973	13/ 1	22 1	8 72	84.7	29,327	-393,153
5	3RD FL FC	29,105	13/ 1	22 1	3 72	83.8	44,831	-565,680	13/ 1	22 1	8 72	83.8	44,831	-553
Zone	5 Total/Ave.	29,105		22 1	72	83.8	44,831	-565,680		22 1	8 72	83.8	44,831	~553
Zone	5 Block	29,105	13/ 1	22 1	72	83.8	44,831	-565,680	13/ 1	22 1	8 72	83.8	44,831	-553,725
System	5 Total/Ave.	29,105		22 1	3 72	83.8	44,831	-565,680		22 1	8 72	83.8	44,831	-553,725
System	5 Block	29,105	13/ 1	22 1	72	83.8	44,831	-565,680	13/ 1	22 1	8 72	83.8	44,831	-553,725
6	4TH FL AHU	29,105	13/ 1	22 1	72	78.2	24,447	-161,781	13/ 1	22 1	8 72	78.2	24,447	-249,438
Zone	6 Total/Ave.	29,105		22 1		78.2	24,447	-161,781		22 1	8 72	78.2	24,447	-249,438
Zone	6 Block	29,105	13/ 1	22 1		78.2	24,447	-161,781	13/ 1	22 1	8 72	78.2	24,447	-249,438
System	6 Total/Ave.	29,105		22 1	3 72	78.2	24,447	-161,781		22 1	8 72	78.2	24,447	-249,438
System	6 Block	29,105	13/ 1	22 1	72	78.2	24,447	-161,781	13/ 1	22 1	8 72	78.2	24,447	-249,438

COOLING AIRFLOW HEAT GAIN/LOSS - ALTERNATIVE 1 BLDG G101, BASELINE

------AIRFLOW HEAT GAIN AND LOSS ------(At time of Coil Peak)

								Cooling						
			Duct	Supply	Return	System		System		1		Run		System
			Heat	Fan	Fan	Exhaust		Exhaust	Exhaust	Ducted	Plenum			Return
Room	1		Pickup	Heat	Heat F	leat Loss	Total	Airflow						
Number	•	Description	(Btuh)	(Btuh)	(Btuh)	(Btuh)	(Btuh)	(Cfm)		(Cfm)	(Cfm)	(Cfm)	(Cfm)	(Cfm)
1	1ST	FL AHU	0	37,739	0	0	37,739	2,123	o	21,228	0	0	0	21,228
Zone	1	Total/Ave.	0	37,739	0	0	37,739	2,123	0	21,228	0	0	0	21,228
Zone	1	Block	0	37,739	0	0	37,739	2,123	0	21,228	0	0	0	21,228
System	1	Total/Ave.	0	37,739	0	0	37,739	2,123	0	21,228	0	0	0	21,228
System	1	Block	0	37,739	0	0	37,739	2,123	0	21,228	0	0	0	21,228
2	1ST	FL FC	0	3,009	1,003	0	4,012	0	0	0	0	0	0	11,285
Zone	2	Total/Ave.	0	3,009	1,003	0	4,012	0	0	0	0	0	0	11,285
Zone	2	Block	0	3,009	1,003	0	4,012	0	0	0	0	0	0	11,285
System	2	Total/Ave.	0	3,009	1,003	0	4,012	0	0	0	0	0	0	11,285
System	2	Block	0	3,009	1,003	0	4,012	0	0	0	0	0	0	11,285
3	2ND	FL AHU	0	20,097	0	0	20,097	1,130	0	11,305	0	0	0	11,305
Zone	3	Total/Ave.	0	20,097	0	0	20,097	1,130	0	11,305	0	0	0	11,305
Zone	3	Block	0	20,097	0	0	20,097	1,130	0	11,305	0	0	0	11,305
System	3	Total/Ave.	0	20,097	0	0	20,097	1,130	0	11,305	0	0	0	11,305
System	3	Block	0	20,097	0	0	20,097	1,130	0	11,305	0	0	0	11,305
4	2ND 1	FL FC	0	7,820	2,607	0	10,427	0	0	0	0	0	0	29,327
Zone	4	Total/Ave.	0	7,820	2,607	C	10,427	0	0	0	0	0	0	29,327
Zone	4	Block	0	7,820	2,607	0	10,427	0	0	0	0	0	. 0	29,327
System	4	Total/Ave.	0	7,820	2,607	0	10,427	0	0	0	0	0	0	29,327
System	4	Block	0	7,820	2,607	0	10,427	0	0	0	0	0	0	29,327
5	3RD 1	FL FC	0	11,955	3,985	0	15,940	0	0	0	0	0	0	44,831
Zone	5	Total/Ave.	0	11,955	3,985	0	15,940	0	0	0	0	0	0	44,831
Zone	5	Block	0	11,955	3,985	0	15,940	0	0	0	0	0	0	44,831
System	5	Total/Ave.	0	11,955	3,985	0	15,940	0	0	0	0	0	0	44,831
System	5	Block	0	11,955	3,985	0	15,940	0	0	0	0	0	0	44,831
6	4TH	L AHU	0	43,461	0	0	43,461	2,445	0	24,447	0	0	0	24,447
Zone	6	Total/Ave.	0	43,461	0	. 0	43,461	2,445	0	24,447	0	0	0	24,447
Zone	6	Block	0	43,461	0	0	43,461	2,445	0	24,447	0	0	0	24,447
System	6	Total/Ave.	0	43,461	0	0	43,461	2,445	0	24,447	0	0	0	24,447
System	6	Block	0	43,461	0	0	43,461	2,445	0	24,447	0	0	0	24,447

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HEATING AIRFLOW HEAT GAIN/LOSS - ALTERNATIVE 1 BLDG G101, BASELINE

------AIRFLOW HEAT GAIN AND LOSS------AIRFLOW HEAT GAIN AND

						- Heating	~					
		Supply	Return	System		System	Room			Run		System
		Fan	Fan	Exhaust		Exhaust	Exhaust	Ducted	Plenum	Around	Corridr	Return
Room		Heat	Heat	Heat Loss	Total	Airflow	Airflow	Airflow	Airflow	Airflow	Airflow	Airflow
Number	Description	(Btuh)	(Btuh)	(Btuh)	(Btuh)	(Cfm)	(Cfm)	(Cfm)	(Cfm)	(Cfm)	(Cfm)	(Cfm)
1	1ST FL AHU	37,739	0	0	37,739	2,123	0	21,228	0	0	0	21,228
Zone	<pre>1 Total/Ave.</pre>	37,739	0	0	37,739	2,123	0	21,228	0	0	0	21,228
Zone	1 Block	37,739	0	0	37,739	2,123	0	21,228	0	0	0	21,228
System	<pre>1 Total/Ave.</pre>	37,739	0	0	37,739	2,123	0	21,228	0	ō	Ō	21,228
System	1 Block	37,739	0	0	37,739	2,123	0	21,228	0	Ó	0	21,228
2	1ST FL FC	3,009	0	0	3,009	0	0	. 0	0	Ō	Ó	11,285
Zone	<pre>2 Total/Ave.</pre>	3,009	0	0	3,009	0	0	0	0	0	0	11,285
Zone	2 Block	3,009	0	0	3,009	0	0	0	0	0	0	11,285
System	<pre>2 Total/Ave.</pre>	3,009	0	0	3,009	0	0	0	0	0	0	11,285
System	2 Block	3,009	0	0	3,009	0	0	0	0	0	Ō	11,285
3	2ND FL AHU	20,097	0	0	20,097	1,130	0	11,305	0	Ó	0	11,305
Zone	3 Total/Ave.	20,097	0	0	20,097	1,130	0	11,305	0	Ō	ō	11,305
Zone	3 Block	20,097	0	0	20,097	1,130	0	11,305	0	0	0	11,305
System	3 Total/Ave.	20,097	0	0	20,097	1,130	0	11,305	0	0	0	11,305
System	3 Block	20,097	0	0	20,097	1,130	0	11,305	0	0	0	11,305
4	2ND FL FC	7,820	0	0	7,820	. 0	0	. 0	0	ō	ō	29,327
Zone	4 Total/Ave.	7,820	0	0	7,820	0	0	0	0	0	Ō	29,327
Zone	4 Block	7,820	0	0	7,820	0	0	0	0	0	Ö	29,327
System	4 Total/Ave.	7,820	0	0	7,820	0	0	0	0	0	0	29,327
System	4 Block	7,820	0	0	7,820	0	0	0	0	0	0	29,327
5	3RD FL FC	11,955	0	0	11,955	0	0	0	0	0	0	44,83
Zone	5 Total/Ave.	11,955	0	0	11,955	0	0	0	0	0	0	44,83
Zone	5 Block	11,955	0	0	11,955	0	0	0	0	0	0	44,831
System	5 Total/Ave.	11,955	0	0	11,955	0	0	0	0	0	0	44,831
System	5 Block	11,955	0	0	11,955	0	0	0	0	0	0	44,831
6	4TH FL AHU	43,461	0	0	43,461	2,445	0	24,447	0	0	0	24,447
Zone	6 Total/Ave.	43,461	0	0	43,461	2,445	0	24,447	0	0	0	24,447
Zone	6 Block	43,461	0	0	43,461	2,445	0	24,447	0	0	0	24,447
System	6 Total/Ave.	43,461	0	0	43,461	2,445	0	24,447	0	0	0	24,447
System	6 Block	43,461	0	0	43,461	2,445	0	24,447	0	0	0	24,447

ROOM PSYCHROMETRICS - ALTERNATIVE 1 BLDG G101, BASELINE

------PSYCHROMETRIC STATE POINTS-----

Room 2

	Dry	Wet	Relat.	Humid.		Temp.
	Bulb	Bulb	Humid.	Ratio	Enthalpy	Diff.
	(F)	(F)	(%)	(GR)	(Btu/Lb)	(F)
Space	76.0	63.2	50.0	69.8	29.2	
Main System						
Return Air Heat Pickup						-0.1
Return Fan						0.1
Return Air	76.0	63.2	50.0	69.8	29.2	
Outdoor Air	92.3	74.4	44.2	105.0	38.7	
Return/Outdoor Air Mix	76.0	63.2	50.0	69.8	29.2	
Blow through Fan						0.1
Entering Coil	76.1	63.2	49.9	69.8	29.2	
Leaving Coil	58.6	56.0	85.6	65.5	24.3	
Draw Through Fan						0.0
Duct Frictional Heat						0.2
Supply Duct Heat Gain						0.0
Cold Deck Supply Air	58.8	56.1	85.0	65.5	24.3	
Supply Air	58.8	56.1	85.0	65.5	24.3	

Percent Outside Air 0.00 (%)
Sensible Heat Ratio (SHR) 0.851
Percent Supply Air Bypassing Coil 0.00 (%)
Coil Airflow 11,285 (Cfm)

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ROOM PSYCHROMETRICS - ALTERNATIVE 1 BLDG G101, BASELINE

----- PSYCHROMETRIC STATE POINTS -----

Room

	Dry	Wet	Relat.	Humid.		Тешр.
	Bulb	Bulb	Humid.	Ratio	Enthalpy	Diff.
	(F)	(F)	(%)	(GR)	(Btu/Lb)	(F)
Space	76.0	63.2	50.0	69.8	29.2	
Main System						
Return Air Heat Pickup						-0.1
Return Fan						0.1
Return Air	76.0	63.2	50.0	69.8	29.2	
Outdoor Air	92.3	74.4	44.2	105.0	38.7	
Return/Outdoor Air Mix	76.0	63.2	50.0	69.8	29.2	
Blow through Fan						0.1
Entering Coil	76.1	63.2	49.9	69.8	29.2	
Leaving Coil	60.3	57.1	82.9	67.5	25.0	
Draw Through Fan						0.0
Duct Frictional Heat						0.2
Supply Duct Heat Gain						0.0
Cold Deck Supply Air	60.5	57.2	82.3	67.5	25.0	
Supply Air	60.5	57.2	82.3	67.5	25.0	

Percent Outside Air 0.00 (%)
Sensible Heat Ratio (SHR) 0.898

Percent Supply Air Bypassing Coil 0.00 (%)
Coil Airflow 29,327 (Cfm)

ROOM PSYCHROMETRICS - ALTERNATIVE 1 BLDG G101, BASELINE

Room 5

	Dry	Wet	Relat.	Humid.		Temp.
	Bulb	Bulb	Humid.	Ratio	Enthalpy	Diff.
	(F)	(F)	(%)	(GR)	(Btu/Lb)	(F)
Space	76.0	63.2	50.0	69.8	29.2	
Main System						
Return Air Heat Pickup						-0.1
Return Fan						0.1
Return Air	76.0	63.2	50.0	69.8	29.2	
Outdoor Air	92.3	74.4	44.2	105.0	38.7	
Return/Outdoor Air Mix	76.0	63.2	50.0	69.8	29.2	
Blow through Fan						0.1
Entering Coil	76.1	63.2	49.9	69.8	29.2	
Leaving Coil	60.1	57.0	83.3	67.2	24.9	
Draw Through Fan						0.0
Duct Frictional Heat						0.2
Supply Duct Heat Gain						0.0
Cold Deck Supply Air	60.3	57.0	82.7	67.2	24.9	
Supply Air	60.3	57.0	82.7	67.2	24.9	

Percent Outside Air 0.00 (%)
Sensible Heat Ratio (SHR) 0.889
Percent Supply Air Bypassing Coil 0.00 (%)
Coil Airflow 44,831 (Cfm)

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ZONE PSYCHROMETRICS - ALTERNATIVE 1 BLDG G101, BASELINE

Zone 1

	Dry	Wet	Relat.	Humid.		Temp.
	Bulb	Bulb	Humid.	Ratio	Enthalpy	Diff.
	(F)	(F)	(%)	(GR)	(Btu/Lb)	(F)
Space	76.0	63.2	50.0	69.8	29.2	
Main System						
Return Air Heat Pickup						0.0
Return Fan						0.0
Return Air	76.0	63.2	50.0	69.8	29.2	
Outdoor Air	92.3	74.4	44.2	105.0	38.7	
Return/Outdoor Air Mix	77.6	64.5	49.7	73.3	30.1	
Blow through Fan						0.0
Entering Coil	77.6	64.5	49.7	73.3	30.1	
Leaving Coil	60.8	57.9	84.5	70.0	25.5	
Draw Through Fan						0.7
Duct Frictional Heat						0.9
Supply Duct Heat Gain						0.0
Cold Deck Supply Air	62.5	58.5	79.7	70.0	25.9	
Supply Air	62.5	58.5	79.7	70.0	25.9	

Percent Outside Air 10.00 (%)
Sensible Heat Ratio (SHR) 0.959
Percent Supply Air Bypassing Coil 0.00 (%)
Coil Airflow 21,228 (Cfm)

ZONE PSYCHROMETRICS - ALTERNATIVE 1 BLDG G101, BASELINE

----- PSYCHROMETRIC STATE POINTS -----

Zone 3

	Dry	Wet	Relat.	Humid.		Temp.
	Bulb	Bulb	Humid.	Ratio	Enthalpy	Diff.
	(F)	(F)	(%)	(GR)	(Btu/Lb)	(F)
Space	76.0	63.2	50.0	69.8	29.2	
Main System						
Return Air Heat Pickup						0.0
Return Fan						0.0
Return Air	76.0	63.2	50.0	69.8	29.2	
Outdoor Air	92.3	74.4	44.2	105.0	38.7	
Return/Outdoor Air Mix	77.6	64.5	49.7	73.3	30.1	
Blow through Fan						0.0
Entering Coil	77.6	64.5	49.7	73.3	30.1	
Leaving Coil	60.6	57.7	84.9	69.7	25.4	
Draw Through Fan						0.7
Duct Frictional Heat						0.9
Supply Duct Heat Gain						0.0
Cold Deck Supply Air	62.2	58.3	80.0	69.7	25.8	
Supply Air	62.2	58.3	80.0	69.7	25.8	

Percent Outside Air 10.00 (%)
Sensible Heat Ratio (SHR) 0.949
Percent Supply Air Bypassing Coil 0.00 (%)
Coil Airflow 11,305 (Cfm)

ZONE PSYCHROMETRICS - ALTERNATIVE 1 BLDG G101, BASELINE

------PSYCHROMETRIC STATE POINTS-----

Zone 6

	Dry	Wet	Relat.	Humid.		Temp.
	Bulb	Bulb	Humid.	Ratio	Enthalpy	Diff.
	(F)	(F)	(%)	(GR)	(Btu/Lb)	(F)
Space	76.0	63.2	50.0	69.8	29.2	
Main System						
Return Air Heat Pickup						0.0
Return Fan						0.0
Return Air	76.0	63.2	50.0	69.8	29.2	
Outdoor Air	92.0	74.4	44.6	105.0	38.6	
Return/Outdoor Air Mix	77.6	64.5	49.8	73.3	30.1	
Blow through Fan						0.0
Entering Coil	77.6	64.5	49.8	73.3	30.1	
Leaving Coil	60.8	57.9	84.5	70.0	25.5	
Draw Through Fan						0.7
Duct Frictional Heat						0.9
Supply Duct Heat Gain						0.0
Cold Deck Supply Air	62.5	58.5	79.7	70.0	25.9	
Supply Air	62.5	58.5	79.7	70.0	25.9	

 Percent Outside Air
 10.00 (%)

 Sensible Heat Ratio (SHR)
 0.958

 Percent Supply Air Bypassing Coil
 0.00 (%)

 Coil Airflow
 24,447 (Cfm)



BUILDING U-VALUES - ALTERNATIVE 1 BLDG G101, BASELINE

											Room	Room Capac.
Room				Summr	Wintr		Summr	Wintr			(1b/	(Btu/
Number	Description	Part.	ExFlr	Skylt	Skylt	Roof	Windo	Windo	Wall	Ceil.	sqft)	sqft/F)
1	1ST FL AHU	0.000	0.620	0.000	0.000	0.000	1.100	1.211	0.250	0.317	25.6	5.11
Zone	<pre>1 Total/Ave.</pre>	0.000	0.620	0.000	0.000	0.000	1.100	1.211	0.250	0.317	25.6	5.11
System	<pre>1 Total/Ave.</pre>	0.000	0.620	0.000	0.000	0.000	1.100	1.211	0.250	0.317	25.6	5.11
2	1ST FL FC	0.000	0.620	0.000	0.000	0.000	1.100	1.211	0.250	0.317	25.5	5.10
Zone	<pre>2 Total/Ave.</pre>	0.000	0.620	0.000	0.000	0.000	1.100	1.211	0.250	0.317	25.5	5.10
System	2 Total/Ave.	0.000	0.620	0.000	0.000	0.000	1.100	1.211	0.250	0.317	25.5	5.10
3	2ND FL AHU	0.000	0.000	0.000	0.000	0.000	1.100	1.211	0.250	0.317	24.0	4.80
Zone	3 Total/Ave.	0.000	0.000	0.000	0.000	0.000	1.100	1.211	0.250	0.317	24.0	4.80
System	3 Total/Ave.	0.000	0.000	0.000	0.000	0.000	1.100	1.211	0.250	0.317	24.0	4.80
- 4	2ND FL FC	0.000	0.000	0.000	0.000	0.000	1.100	1.211	0.250	0.317	25.3	5.06
Zone	4 Total/Ave.	0.000	0.000	0.000	0.000	0.000	1.100	1.211	0.250	0.317	25.3	5.06
System	4 Total/Ave.	0.000	0.000	0.000	0.000	0.000	1.100	1.211	0.250	0.317	25.3	5.06
_ 5	3RD FL FC	0.000	0.000	0.000	0.000	0.000	1.100	1.211	0.250	0.317	24.0	4.80
Zone	5 Total/Ave.	0.000	0.000	0.000	0.000	0.000	1.100	1.211	0.250	0.317	24.0	4.80
System	5 Total/Ave.	0.000	0.000	0.000	0.000	0.000	1.100	1.211	0.250	0.317	24.0	4.80
- 6	4TH FL AHU	0.000	0.000	0.000	0.000	0.030	0.000	0.000	0.250	0.317	36.6	9.46
Zone	6 Total/Ave.	0.000	0.000	0.000	0.000	0.030	0.000	0.000	0.250	0.317	36.6	9.46
System	6 Total/Ave.	0.000	0.000	0.000	0.000	0.030	0.000	0.000	0.250	0.317	36.6	9.46
Buildin	g	0.000	0.620	0.000	0.000	0.030	1.100	1.211	0.250	0.317	27.7	6.05

BUILDING AREAS - ALTERNATIVE 1 BLDG G101, BASELINE



Room Number	Description		er of icate Rm	Floor Area/Dupl Room (sqft)	Total Floor Area (sqft)	Partition Area (sqft)	Exposed Floor Area (sqft)	Skylight Area (sqft)	Skl /Rf (%)	Net Roof Area (sqft)	Window Area (sqft)	Win /Wl (%)	Net Wall Area (sqft)
1	1ST FL AHU	1	1	20,697	20,697	0	700	0	0	0	1,064	15	
Zone	1 Total/Ave.	-	•	20,037	20,697	ō	700	0	٥	0	1,064		6,141
System	1 Total/Ave.				20,697		700	_	0	-	-	15	6,141
System 2	·			10.000	•	0		0	_	0	1,064	15	6,141
_	1ST FL FC	Τ.	1	10,260	10,260	0	387	0	0	0 .	840	22	3,025
Zone	<pre>2 Total/Ave.</pre>				10,260	0	387	0	0	0	840	22	3,025
System	<pre>2 Total/Ave.</pre>				10,260	0	387	0	0	0	840	22	3,025
3	2ND FL AHU	1	1	10,435	10,435	0	0	0	0	0	140	5	2,700
Zone	3 Total/Ave.				10,435	0	0	0	0	0	140	5	2,700
System	3 Total/Ave.				10,435	0	0	0	0	0	140	5	2,700
4	2ND FL FC	1	1	20,580	20,580	ō	ō	ō	ō	ō	1,764	23	5,966
Zone	4 Total/Ave.	_	_		20,580	0	Ô	ō	0	ō	1,764	23	5,966
System	4 Total/Ave.				20,580	ō	ō	ō	ō	ō	1,764	23	5,966
5	3RD FL FC	1	1	29,105	29,105	0	o	ō	ō	ō	2,660	26	7,510
Zone	5 Total/Ave.	_	_	,	29,105	o o	ō	o o	ō	ō	2,660	26	7,510
System	5 Total/Ave.				29,105	ō	Ô	ō	ō	Ô	2,660	26	7,510
6	4TH FL AHU	1	1	29,105	29,105	0	0	Ö	ō	29,105	2,000	0	10,170
	6 Total/Ave.	*	•	23,103		0	0	_	0	•	0	Ö	-
Zone					29,105	0	0	0	_	29,105	=	_	10,170
System	6 Total/Ave.				29,105	0	0	0	0	29,105	0	0	10,170
Buildin	g				120,182	0	1,087	0	0	29,105	6,468	15	35,512

ASHRAE 90 ANALYSIS - ALTERNATIVE 1 BLDG G101, BASELINE

----- A S H R A E 9 0 A N A L Y S I S -----

Overall Roof U-Value = 0.030 (Btu/Hr/Sq Ft/F)
Overall Wall U-Value = 0.381 (Btu/Hr/Sq Ft/F)
Overall Building U-Value = 0.237 (Btu/Hr/Sq Ft/F)

Roof Overall Thermal Transfer Value (OTTVr) = 1.15 (Btu/Hr/Sq Ft) Wall Overall Thermal Transfer Value (OTTVw) = 22.75 (Btu/Hr/Sq Ft) R

SYSTEM LOAD PROFILE - ALTERNATIVE 1 BLDG G101, BASELINE

Main System 1 SZ SINGLE ZONE

Percent	Cool	ing Loa	d	Heatir	ig Load		Cooling	Airflow		Heating	Airflow	
Design	Cap.	Hours	Hours	Capacity	Hours	Hours	Cap.	Hours	Hours	Cap.	Hours	Hours
Load	(Ton)	(%)		(Btuh)	(%)		(Cfm)	(₺)		(Cfm)	(%)	
0 - 5	1.8	5	183	-11,901	5	48	1,061.4	0	0	0.0	0	0
5 - 10	3.6	11	385	-23,803	4	37	2,122.8	0	0	0.0	0	0
10 - 15	5.4	10	367	-35,704	4	41	3,184.2	0	0	0.0	0	0
15 - 20	7.2	9	345	-47,606	8	77	4,245.6	0	0	0.0	0	0
20 - 25	9.0	10	359	-59,507	9	91	5,307.0	0	0	0.0	0	0
25 - 30	10.7	7	263	-71,408	12	115	6,368.4	0	0	0.0	0	0
30 - 35	12.5	10	366	-83,310	11	114	7,429.8	0	0	0.0	0	0
35 - 40	14.3	3	114	-95,211	7	65	8,491.2	0	0	0.0	0	0
40 - 45	16.1	3	124	-107,112	8	79	9,552.6	0	0	0.0	0	0
45 - 50	17.9	3	108	-119,014	12	118	10,614.0	0	0	0.0	0	0
50 - 55	19.7	4	149	-130,915	3	34	11,675.4	0	0	0.0	0	0
55 - 60	21.5	3	109	-142,817	14	138	12,736.8	0	0	0.0	0	0
60 - 65	23.3	3	102	-154,718	4	40	13,798.2	0	0	0.0	0	0
65 - 70	25.1	6	217	-166,619	0	0	14,859.6	0	0	0.0	0	0
70 - 75	26.9	5	193	-178,521	0	0	15,921.0	0	0	0.0	0	0
75 - 80	28.6	2	84	-190,422	0	0	16,982.4	0	0	0.0	0	0
80 - 85	30.4	2	65	-202,324	0	0	18,043.8	0	0	0.0	0	0
85 - 90	32.2	4	130	-214,225	0	0	19,105.2	0	0	0.0	0	0
90 - 95	34.0	0	0	-226,126	0	0	20,166.6	0	0	0.0	0	0
95 - 100	35.8	0	Ō	-238,028	0	0	21,228.0	100	8,760	0.0	0	0
Hours Off	0.0	0	5,097	0	0	7,763	0.0	0	0	0.0	0	8,760

Main System 2 FC FAN COIL

Percent	Cool	ing Loa	d	Heatin	ng Load		Cooling	Airflow		Heating	Airflow	
Design	Cap.	Hours	Hours	Capacity	Hours	Hours	Cap.	Hours	Hours	Cap.	Hours	Hours
Load	(Ton)	(%)		(Btuh)	(%)		(Cfm)	(%)		(Cfm)	(%)	
0 - 5	1.1	10	264	-10,356	9	162	564.3	0	0	0.0	0	0
5 - 10	2.1	15	394	-20,712	4	73	1,128.5	0	0	0.0	0	0
10 - 15	3.2	9	225	-31,068	10	166	1,692.8	0	0	0.0	0	0
15 - 20	4.3	13	351	-41,424	10	177	2,257.0	0	0	0.0	0	0
20 - 25	5.4	6	156	-51,780	10	182	2,821.3	0	0	0.0	0	0
25 - 30	6.4	2	54	-62,136	10	173	3,385.5	0	0	0.0	0	0
30 - 35	7.5	9	232	-72,492	18	318	3,949.8	0	0	0.0	0	0
35 - 40	8.6	5	131	-82,848	21	372	4,514.1	0	0	0.0	0	0
40 - 45	9.7	5	124	-93,204	7	115	5,078.3	0	0	0.0	0	0
45 - 50	10.7	3	91	-103,560	0	0	5,642.6	0	0	0.0	0	0
50 - 55	11.8	6	171	-113,916	0	0	6,206.8	0	0	0.0	0	0
55 - 60	12.9	10	252	-124,272	0	0	6,771.1	0	0	0.0	0	0
60 - 65	14.0	0	0	-134,628	0	0	7,335.4	0	0	0.0	0	0
65 - 70	15.0	0	0	-144,984	0	0	7,899.6	0	0	0.0	0	0
70 - 75	16.1	6	150	-155,340	0	0	8,463.9	0	0	0.0	0	0
75 - 80	17.2	2	45	-165,696	0	0	9,028.1	0	0	0.0	0	0
80 - 85	18.3	0	0	-176,052	0	0	9,592.4	0	0	0.0	0	0
85 - 90	19.3	0	0	-186,408	0	0	10,156.6	0	0	0.0	0	0
90 - 95	20.4	0	0	-196,764	0	0	10,720.9	0	0	0.0	0	0
95 - 100	21.5	0	0	-207,119	0	0	11,285.2	100	8,760	0.0	0	0
Hours Off	0.0	0	6,120	0	0	7,022	0.0	0	0	0.0	0	8,760

SYSTEM LOAD PROFILE - ALTERNATIVE 1 BLDG G101, BASELINE

Main System	n 3 S	sz	SIN	IGLE ZONE								
Percent	Cool	ling Los	d	Heati	ng Load		Cooling	Airflow		Heating	Airflow	
Design	Cap.	Hours	Hours	Capacity	Hours	Hours	Cap.	Hours	Hours	Cap.	Hours	Hours
Load	(Ton)	(%)		(Btuh)	(%)		(Cfm)	(%)		(Cfm)	(%)	
0 - 5	1.0	8	325	-4,123	5	26	565.2	0	0	0.0	Ó	0
5 - 10	2.0	8	331	-8,246	2	10	1,130.5	0	0	0.0	0	ō
10 - 15	3.0	15	609	-12,369	8	42	1,695.7	0	0	0.0	0	0
15 - 20	4.0	9	372	-16,492	6	31	2,260.9	0	0	0.0	0	0
20 - 25	5.0	10	398	-20,615	13	69	2,826.1	0	0	0.0	0	0
25 - 30	6.0	11	423	-24,738	7	36	3,391.4	0	0	0.0	0	0
30 - 35	7.0	3	138	-28,862	7	36	3,956.6	0	0	0.0	0	0
35 - 40	8.0	1	22	-32,985	8	44	4,521.8	Ó	0	0.0	0	0
40 - 45	9.0	1	42	-37,108	9	47	5,087.0	0	0	0.0	0	0
4 5 - 50	10.0	2	66	-41,231	10	56	5,652.3	0	0	0.0	0	0
50 - 55	11.0	3	131	-45,354	7	37	6,217.5	0	0	0.0	0	0
55 - 60	12.0	1	42	-49,477	11	62	6,782.7	0	0	0.0	0	0
60 - 65	13.0	4	174	-53,600	8	46	7,348.0	0	0	0.0	0	0
65 - 70	14.0	4	167	-57,723	0	0	7,913.2	0	0	0.0	0	0
70 - 75	15.0	3	107	-61,846	0	0	8,478.4	0	0	0.0	0	0
75 - 80	16.0	6	240	-65,969	0	0	9,043.6	0	0	0.0	0	0
80 - 85	17.0	4	147	-70,092	0	0	9,608.9	0	0	0.0	0	0
85 - 90	18.0	2	65	-74,215	0	0	10,174.1	0	0	0.0	0	0
90 - 95	19.0	4	150	-78,338	0	0	10,739.3	0	0	0.0	0	0
95 - 100	20.0	0	0	-82,461	0	0	11,304.5	100	8,760	0.0	0	0
Hours Off	0.0	0	4,811	0	0	8,218	0.0	0	0	0.0	0	8,760
Main System	4 F	C	FAN	COIL								
	Cool	ing Loa	d	Heati	ng Load		Cooling	Airflow		Heating	Airflow	
Design	•	Hours	Hours	Capacity	Hours	Hours	Cap.	Hours	Hours	Cap.	Hours	Hours
Load	(Ton)	(%)		(Btuh)	(%)		(Cfm)	(%)		(Cfm)	(%)	
0 - 5	2.4	11	311	-19,658	5	79	1,466.3	0	0	0.0	Ö	0
5 - 10	4.9	15	410	-39,315	4	60	2,932.7	0	0	0.0	0	0
10 - 15	7.3	12	342	-58,973	5	68	4,399.0	0	0	0.0	0	0
15 - 20	9.8	11	298	-78,631	11	165	5,865.3	0	0	0.0	0	0

Percent	0001	Tud ros	10	Heati	ng road		Cooling	VILLIOM		Heating	Airflow	
Design	Cap.	Hours	Hours	Capacity	Hours	Hours	Cap.	Hours	Hours	Cap.	Hours	Hours
Load	(Ton)	(%)		(Btuh)	(%)		(Cfm)	(%)		(Cfm)	(%)	
0 - 5	2.4	11	311	-19,658	5	79	1,466.3	0	0	0.0	Ö	0
5 - 10	4.9	15	410	-39,315	4	60	2,932.7	0	0	0.0	0	0
10 ~ 15	7.3	12	342	-58,973	5	68	4,399.0	0	0	0.0	0	0
15 - 20	9.8	11	298	-78,631	11	165	5,865.3	0	0	0.0	0	0
20 - 25	12.2	3	83	-98,288	12	170	7,331.7	0	0	0.0	0	0
25 - 30	14.7	5	143	-117,946	13	192	8,798.0	0	0	0.0	0	0
30 - 35	17.1	5	141	-137,603	7	101	10,264.3	0	0	0.0	0	0
35 - 40	19.6	6	165	-157,261	28	402	11,730.7	0	0	0.0	0	0
40 - 45	22.0	5	129	-176,919	14	205	13,197.0	0	0	0.0	0	0
45 - 50	24.5	2	47	-196,576	0	0	14,663.3	0	0	0.0	0	0
50 - 55	26.9	7	195	-216,234	0	0	16,129.7	0	0	0.0	0	0
55 - 60	29.3	6	172	-235,892	0	0	17,596.0	0	0	0.0	0	0
60 - 65	31.8	5	147	-255,549	0	0	19,062.3	0	0	0.0	0	0
65 - 70	34.2	0	0	-275,207	0	0	20,528.7	0	0	0.0	0	0
70 - 75	36.7	2	43	-294,865	0	0	21,995.0	0	0	0.0	0	0
75 - 80	39.1	5	152	-314,522	0	0	23,461.3	0	0	0.0	0	0
80 - 85	41.6	0	0	-334,180	0	0	24,927.7	0	0	0.0	0	0
85 - 90	44.0	0	0	-353,837	0	0	26,394.0	0	0	0.0	0	0
90 - 95	46.5	0	0	-373,495	0	0	27,860.3	0	0	0.0	0	0
95 - 100	48.9	0	0	-393,153	0	0	29,326.6	100	8,760	0.0	0	0
Hours Off	0.0	0	5,982	0	0	7,318	0.0	0	0	0.0	0	8,760

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SYSTEM LOAD PROFILE - ALTERNATIVE 1 BLDG G101, BASELINE

Main System 5 FC FAN COIL

Percent	Cool	ing Loa	d	Heatin	ng Load		Cooling	Airflow		Heating	Airflow	
Design	Cap.	Hours	Hours	Capacity	Hours	Hours	Cap.	Hours	Hours	Cap.	Hours	Hours
Load	(Ton)	(%)		(Btuh)	(%)		(Cfm)	(%)		(Cfm)	(%)	
0 - 5	3.8	2	93	-27,686	50	3	2,241.5	0	0	0.0	Ò	0
5 - 10	7.6	4	173	-55,372	0	0	4,483.1	0	0	0.0	0	0
10 - 15	11.4	9	395	-83,059	50	3	6,724.6	0	0	0.0	0	0
15 - 20	15.2	15	664	-110,745	0	0	8,966.2	0	0	0.0	0	0
20 - 25	18.9	10	459	-138,431	0	0	11,207.7	0	0	0.0	0	0
25 - 30	22.7	13	563	-166,117	0	0	13,449.2	0	0	0.0	0	0
30 - 35	26.5	9	410	-193,804	0	0	15,690.8	0	0	0.0	0	0
35 - 40	30.3	10	432	-221,490	0	0	17,932.3	0	0	0.0	0	0
40 - 45	34.1	6	245	-249,176	0	0	20,173.9	0	0	0.0	0	0
45 - 50	37.9	3	147	-276,862	0	0	22,415.4	0	0	0.0	0	0
50 - 55	41.7	4	173	-304,549	0	0	24,657.0	0	0	0.0	0	0
55 - 60	45.5	5	213	-332,235	0	0	26,898.5	0	0	0.0	0	0
60 - 65	49.3	5	234	-359,921	0	0	29,140.0	0	0	0.0	0	0
65 - 70	53.0	0	20	-387,607	0	0	31,381.6	0	0	0.0	0	0
70 - 75	56.8	0	0	-415,294	0	0	33,623.1	0	0	0.0	0	0
75 - 80	60.6	3	150	-442,980	0	0	35,864.7	0	0	0.0	0	0
80 ~ 85	64.4	1	45	-470,666	0	0	38,106.2	0	0	0.0	0	0
85 - 90	68.2	0	0	-498,352	0	0	40,347.8	0	0	0.0	0	0
90 - 95	72.0	0	0	-526,039	0	0	42,589.3	0	0	0.0	0	0
95 - 100	75.8	0	0	-553,725	0	0	44,830.8	100	8,760	0.0	0	0
Hours Off	0.0	0	4,344	0	0	8,754	0.0	0	0	0.0	0	8,760

Main System

6 SZ

SINGLE ZONE

Percent	Coo	ling Loa	d	Heati	ng Load		Cooling	Airflow		Heating	Airflow	,
Design	Cap.	Hours	Hours	Capacity	Hours	Hours	Cap.	Hours	Hours	Cap.	Hours	Hours
Load	(Ton)	(%)		(Btuh)	(%)		(Cfm)	(%)		(Cfm)	(%)	
0 - 5	2.1	7	269	-12,472	4	37	1,222.3	0	0	0.0	0	0
5 - 10	4.1	12	442	-24,944	3	29	2,444.7	0	0	0.0	0	0
10 - 15	6.2	6	235	-37,416	9	86	3,667.0	0	0	0.0	0	0
15 - 20	8.2	7	257	-49,888	8	69	4,889.3	0	0	0.0	0	0
20 - 25	10.3	8	290	-62,360	5	47	6,111.7	0	0	0.0	0	0
25 - 30	12.3	7	261	-74,831	5	45	7,334.0	0	0	0.0	0	0
30 - 35	14.4	6	229	-87,303	7	63	8,556.4	0	0	0.0	0	0
35 - 40	16.5	4	141	-99,775	8	75	9,778.7	0	0	0.0	0	0
40 - 45	18.5	10	375	-112,247	7	68	11,001.0	0	0	0.0	0	0
45 - 50	20.6	7	241	-124,719	7	62	12,223.4	0	0	0.0	0	0
50 - 55	22.6	2	60	-137,191	9	82	13,445.7	0	0	0.0	0	0
55 - 6 0	24.7	3	112	-149,663	6	59	14,668.1	0	0	0.0	0	0
60 - 65	26.8	5	172	-162,135	7	67	15,890.4	0	0	0.0	0	0
65 - 70	28.8	5	172	-174,607	13	116	17,112.7	0	0	0.0	0	0
70 - 75	30.9	2	82	-187,079	1	9	18,335.1	0	0	0.0	0	0
75 - 80	32.9	3	108	-199,550	0	0	19,557.4	0	0	0.0	0	0
80 - 85	35.0	2	65	-212,022	0	0	20,779.7	0	0	0.0	0	0
85 - 90	37.0	3	107	-224,494	0	0	22,002.1	0	0	0.0	0	0
90 - 95	39.1	0	0	-236,966	0	0	23,224.4	0	0	0.0	0	0
95 - 100	41.2	0	0	-249,438	0	0	24,446.7	100	8,760	0.0	0	0
Hours Off	0.0	o	5,142	0	0	7,846	0.0	0	. 0	0.0	0	8,760

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SYSTEM TOTALS LOAD PROFILE - ALTERNATIVE 1 BLDG G101, BASELINE

System Totals

Percent	Cool	ling Los	ıd	Heati	ng Load		Cooling	Airflow	,	Heating	Airflow	,
Design	Cap.	Hours	Hours	Capacity	Hours	Hours	Cap.	Hours		Cap.	Hours	Hours
Load	(Ton)	(%)		(Btuh)	(%)		(Cfm)	(\$)		(Cfm)	(%)	
0 - 5	12.2	13	564	-86,196	25	444	7,121.1	0	0	0.0	0	0
5 - 10	24.3	16	725	-172,392	11	188	14,242.2	0	0	0.0	0	0
10 - 15	36.5	12	540	-258,589	24	422	21,363.3	0	0	0.0	0	0
15 ~ 20	48.6	9	405	-344,785	11	195	28,484.4	0	0	0.0	0	0
20 - 25	60.8	6	280	-430,981	7	122	35,605.5	0	0	0.0	0	0
25 - 30	72.9	8	362	-517,177	10	173	42,726.6	0	0	0.0	0	0
30 - 35	85.1	6	261	-603,373	9	162	49,847.7	0	0	0.0	0	0
35 - 40	97.3	3	115	-689,570	2	33	56,968.8	0	0	0.0	0	0
40 - 45	109.4	4	182	-775,766	0	3	64,089.9	0	0	0.0	0	0
45 - 50	121.6	4	184	-861,962	0	0	71,211.0	0	0	0.0	0	0
50 - 55	133.7	2	89	-948,158	0	0	78,332.1	0	0	0.0	0	0
55 - 60	145.9	3	153	-1,034,355	0	0	85,453.2	0	0	0.0	0	0
60 - 65	158.0	4	171	-1,120,551	0	0	92,574.3	0	0	0.0	0	0
65 - 70	170.2	4	190	-1,206,747	0	0	99,695.4	0	0	0.0	0	0
70 - 75	182.4	0	0	-1,292,943	0	0	106,816.4	0	0	0.0	0	0
75 - 80	194.5	2	88	-1,379,140	0	0	113,937.5	0	0	0.0	0	0
80 - 85	206.7	2	107	-1,465,336	0	0	121,058.6	0	0	0.0	0	0
85 - 90	218.8	0	0	-1,551,532	0	0	128,179.7	0	0	0.0	0	0
90 - 95	231.0	0	0	-1,637,728	0	0	135,300.8	0	0	0.0	0	0
95 - 100	243.1	0	0	-1,723,924	0	0	142,421.9	100	8,760	0.0	0	0
Hours Off	0.0	0	4,344	0	0	7,018	0.0	0	0	0.0	0	8,760

Trane Air Conditioning Economics
By: Trane Customer Direct Service Network

Janua	rv		Desi	an	Weekd	27	Satu	rday	Sund	937	w 4	
Hour	OADB	OAWB	Htg Btuh	•		-		-		-	Mond	
1			•		Htg Btuh	-	Htg Btuh	-	Htg Btuh	-	Htg Btuh	•
	33.4	30.4	-608,634	0.0	-213,519	0.0	-113,350	0.0	-521,697	0.0	-521,697	0.0
2	32.1	29.3	-654,546	0.0	-223,028	0.0	-427,242	0.0	-556,449	0.0	-556,449	0.0
3		29.3	-695,731	0.0	-233,030	0.0	-530,660	0.0	-580,041	0.0	-580,041	0.0
4		29.5	-720,659	0.0	-233,126	0.0	-539,311	0.0	-590,059	0.0	-590,059	0.0
5		30.3	-740,165	0.0	-244,885	0.0	-557,165	0.0	-608,001	0.0	-608,001	0.0
6		31.3	-742,302	0.0	-420,524	0.0	-568,386	0.0	-618,968	0.0	-618,968	0.0
7	35.0	32.6	-728,260	0.0	-546,940	0.0	-546,996	0.0	-595,879	0.0	-595,879	0.0
8		34.4	-26,575	0.0	-26,831	0.0	-493,545	0.0	-539,387	0.0	-26,860	0.0
9	38.5	36.3	0	0.0	0	0.0	-451,673	0.0	-494,803	0.0	0	0.0
10		37.7	0	0.0	0	0.0	-398,882	0.0	-437,828	0.0	0	0.0
11		38.7	0	0.0	0	0.0	-342,287	0.0	-375,514	0.0	0	0.0
12	44.2	39.6	0	0.0	0	0.0	-284,118	0.0	-311,537	0.0	0	0.0
13	45.8	40.5	0	0.0	0	0.0	-232,469	0.0	-254,540	0.0	0	0.0
14	47.2	41.1	0	0.0	0	0.0	-214,763	0.0	-232,832	0.0	0	0.0
15	48.2	41.6	0	0.0	0	0.0	-194,672	0.0	-200,983	0.0	0	0.0
16	48.9	41.8	0	0.0	0	0.0	-161,448	0.0	-161,452	0.0	0	0.0
17	49.1	41.9	0	0.0	0	0.0	-211,844	0.0	-211,848	0.0	0	0.0
18	48.7	41.9	0	0.0	0	0.0	-219,611	0.0	-219,611	0.0	0	0.0
19	47.4	41.7	0	0.0	0	0.0	-236,445	0.0	-236,445	0.0	0	0.0
20	45.5	40.5	0	0.0	0	0.0	-268,752	0.0	-268,752	0.0	0	0.0
21		38.9	0	0.0	0	0.0	-330,964	0.0	-330,964	0.0	0	0.0
22	40.4	36.7	0	0.0	0	0.0	-381,619	0.0	-381,619	0.0	0	0.0
23	37.7		-45,557	0.0	-26,615	0.0	-435,634	0.0	-435,634	0.0	-26,615	0.0
24		32.3	-133,899	0.0	-69,737	0.0	-492,085	0.0	-492,085	0.0	-69,737	0.0
			,		,							
Februa	-		Desi	_	Weekd	-	Satu	-	Sund		Mond	_
Februa Hour	OADB	OAWB	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton
Hour 1	OADB 37.5	34.5	Htg Btuh -195,956	Clg Ton 0.0	Htg Btuh -209,716	Clg Ton 0.0	Htg Btuh -224,337	Clg Ton 0.0	Htg Btuh -486,246	Clg Ton 0.0	Htg Btuh -486,246	Clg Ton 0.0
Hour	OADB	34.5 33.0	Htg Btuh -195,956 -338,694	Clg Ton 0.0 0.0	Htg Btuh -209,716 -231,450	Clg Ton 0.0 0.0	Htg Btuh -224,337 -480,799	Clg Ton 0.0 0.0	Htg Btuh -486,246 -528,705	Clg Ton 0.0 0.0	Htg Btuh -486,246 -528,705	Clg Ton 0.0 0.0
Hour 1 2 3	OADB 37.5 36.0 34.7	34.5 33.0 31.8	Htg Btuh -195,956 -338,694 -512,565	Clg Ton 0.0 0.0 0.0	Htg Btuh -209,716 -231,450 -230,224	Clg Ton 0.0 0.0 0.0	Htg Btuh -224,337 -480,799 -501,287	Clg Ton 0.0 0.0 0.0	Htg Btuh -486,246 -528,705 -545,408	Clg Ton 0.0 0.0 0.0	Htg Btuh -486,246 -528,705 -545,408	Clg Ton 0.0 0.0 0.0
Hour 1 2	OADB 37.5 36.0	34.5 33.0 31.8 30.9	Htg Btuh -195,956 -338,694	Clg Ton 0.0 0.0	Htg Btuh -209,716 -231,450 -230,224 -241,400	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh -224,337 -480,799 -501,287 -528,579	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh -486,246 -528,705 -545,408 -575,596	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh -486,246 -528,705 -545,408 -575,596	Clg Ton 0.0 0.0 0.0 0.0
Hour 1 2 3	OADB 37.5 36.0 34.7	34.5 33.0 31.8	Htg Btuh -195,956 -338,694 -512,565	Clg Ton 0.0 0.0 0.0	Htg Btuh -209,716 -231,450 -230,224 -241,400 -250,334	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh -224,337 -480,799 -501,287 -528,579 -550,931	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878	Clg Ton 0.0 0.0 0.0 0.0
Hour 1 2 3 4	OADB 37.5 36.0 34.7 33.6	34.5 33.0 31.8 30.9	Htg Btuh -195,956 -338,694 -512,565 -540,990	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh -209,716 -231,450 -230,224 -241,400	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh -224,337 -480,799 -501,287 -528,579	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh -486,246 -528,705 -545,408 -575,596	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -639,515	Clg Ton 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5	OADB 37.5 36.0 34.7 33.6 32.8	34.5 33.0 31.8 30.9 30.1 29.8	Htg Btuh -195,956 -338,694 -512,565 -540,990 -557,268	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh -209,716 -231,450 -230,224 -241,400 -250,334	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh -224,337 -480,799 -501,287 -528,579 -550,931	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1	34.5 33.0 31.8 30.9 30.1 29.8	Htg Btuh -195,956 -338,694 -512,565 -540,990 -557,268 -560,286	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh -209,716 -231,450 -230,224 -241,400 -250,334 -334,410	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh -224,337 -480,799 -501,287 -528,579 -550,931 -569,823	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -620,320	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -639,515	Clg Ton 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1	34.5 33.0 31.8 30.9 30.1 29.8 29.6	Htg Btuh -195,956 -338,694 -512,565 -540,990 -557,268 -560,286 -544,984	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh -209,716 -231,450 -230,224 -241,400 -250,334 -334,410 -481,617	Clg Ton	Htg Btuh -224,337 -480,799 -501,287 -528,579 -550,931 -569,823 -574,551	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -620,320 -626,324	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -639,515 -699,164	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6 7 8	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3	Htg Btuh -195,956 -338,694 -512,565 -540,990 -557,268 -560,286 -544,984 -4,518	Clg Ton	Htg Btuh -209,716 -231,450 -230,224 -241,400 -250,334 -334,410 -481,617 -35,040	Clg Ton	Htg Btuh -224,337 -480,799 -501,287 -528,579 -550,931 -569,823 -574,551 -503,000	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -620,320 -626,324 -551,382	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -639,515 -699,164 -35,037	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6 7 8	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6	Htg Btuh -195,956 -338,694 -512,565 -540,990 -557,268 -560,286 -544,984 -4,518	Clg Ton	Htg Btuh -209,716 -231,450 -230,224 -241,400 -250,334 -334,410 -481,617 -35,040	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh -224,337 -480,799 -501,287 -528,579 -550,931 -569,823 -574,551 -503,000 -497,287	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -620,320 -626,324 -551,382 -545,687	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -639,515 -699,164 -35,037	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6 33.0	Htg Btuh -195,956 -338,694 -512,565 -540,990 -557,268 -560,286 -544,984 -4,518	Clg Ton	Htg Btuh -209,716 -231,450 -230,224 -241,400 -250,334 -334,410 -481,617 -35,040 0	Clg Ton	Htg Btuh -224,337 -480,799 -501,287 -528,579 -550,931 -569,823 -574,551 -503,000 -497,287 -477,910	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,876 -620,320 -626,324 -551,382 -545,687 -522,862	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -639,515 -699,164 -35,037 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0 38.5	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6 33.0 34.8	Htg Btuh -195,956 -338,694 -512,565 -540,990 -557,268 -560,286 -544,984 -4,518 0	Clg Ton	Htg Btuh -209,716 -231,450 -230,224 -241,400 -250,334 -334,410 -481,617 -35,040 0	Clg Ton	Htg Btuh -224,337 -480,799 -501,287 -528,579 -550,931 -569,823 -574,551 -503,000 -497,287 -477,910 -441,935	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -620,320 -626,324 -551,382 -545,687 -522,862 -481,174	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -639,515 -699,164 -35,037 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0 38.5 41.3 43.8	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6 33.0 34.8 36.5 38.1	Htg Btuh -195,956 -338,694 -512,565 -540,990 -557,268 -560,286 -544,984 -4,518 0 0	Clg Ton	Htg Btuh -209,716 -231,450 -230,224 -241,400 -250,334 -334,410 -481,617 -35,040 0	Clg Ton	Htg Btuh -224,337 -480,799 -501,287 -528,579 -550,931 -569,832 -574,551 -503,000 -497,287 -477,910 -441,935 -363,945 -317,106	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -620,320 -626,324 -551,382 -545,687 -522,862 -481,174 -396,189	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -639,515 -699,164 -35,037 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0 38.5 41.3 43.8 45.9	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6 33.0 34.8 36.5 38.1 39.5	Htg Btuh -195,956 -338,694 -512,565 -540,990 -557,268 -560,286 -544,984 -4,518 0 0 0 0	Clg Ton	Htg Btuh -209,716 -231,450 -230,224 -241,400 -250,334 -334,410 -481,617 -35,040 0 0	Clg Ton	Htg Btuh -224,337 -480,799 -501,287 -528,579 -550,931 -569,823 -574,551 -503,000 -497,287 -477,910 -441,935 -363,945 -317,106 -283,832	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -620,320 -626,324 -551,382 -545,687 -522,862 -481,174 -396,189 -343,866	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -639,515 -699,164 -35,037 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0 38.5 41.3 43.8 45.9	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6 33.0 34.8 36.5 38.1 39.5 40.4	Htg Btuh -195,956 -338,694 -512,565 -540,990 -557,268 -560,286 -544,984 -4,518 0 0 0 0 0	Clg Ton	Htg Btuh -209,716 -231,450 -230,224 -241,400 -250,334 -334,410 -481,617 -35,040 0 0 0 0 0	Clg Ton	Htg Btuh -224,337 -480,799 -501,287 -528,579 -550,931 -569,823 -574,551 -503,000 -497,287 -477,910 -441,935 -363,945 -317,106 -283,832 -221,219	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -620,320 -626,324 -551,382 -545,687 -522,862 -481,174 -396,189 -343,866 -305,774 -236,229	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -639,515 -699,164 -35,037 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0 38.5 41.3 43.8 45.9 47.2	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6 33.0 34.8 36.5 38.1 39.5 40.4 40.6	Htg Btuh -195,956 -338,694 -512,565 -540,990 -557,268 -560,286 -544,984 -4,518 0 0 0 0 0 0 0	Clg Ton	Htg Btuh -209,716 -231,450 -230,224 -241,400 -250,334 -334,410 -481,617 -35,040 0 0 0 0 0 0	Clg Ton	Htg Btuh -224,337 -480,799 -501,287 -528,579 -550,931 -569,823 -574,551 -503,000 -497,287 -477,910 -441,935 -363,945 -317,106 -283,832 -221,219 -221,306	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -620,320 -626,324 -551,382 -545,687 -522,862 -481,174 -396,189 -343,866 -305,774 -236,229 -221,301	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -639,515 -699,164 -35,037 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	OADB 37.5 36.0 34.7 33.6 32.2 32.1 32.5 33.9 36.0 38.5 41.3 43.8 45.9 47.7 47.5	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6 33.0 34.8 36.5 38.1 40.4 40.6 40.2	Htg Btuh -195,956 -338,694 -512,565 -540,990 -557,268 -560,286 -544,984 -4,518 0 0 0 0 0 0 0	Clg Ton	Htg Btuh -209,716 -231,450 -230,224 -241,400 -250,334 -334,410 -481,617 -35,040 0 0 0 0 0 0 0	Clg Ton	Htg Btuh -224,337 -480,799 -501,287 -528,579 -550,931 -569,823 -574,551 -503,000 -497,287 -477,910 -441,935 -363,945 -317,106 -283,832 -221,219 -221,306 -218,481	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -620,320 -626,324 -551,382 -545,687 -522,862 -481,174 -396,189 -343,866 -305,774 -236,229 -221,301 -218,490	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -639,515 -699,164 -35,037 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	OADB 37.5 36.0 34.7 33.6 32.2 32.1 32.5 33.9 36.0 38.5 41.3 43.8 45.9 47.2 47.7	34.5 33.0 31.8 30.9 30.1 29.6 30.3 31.6 33.0 34.8 36.5 38.1 39.5 40.4 40.6 40.2 39.8	Htg Btuh -195,956 -338,694 -512,565 -540,990 -557,268 -560,286 -544,984 -4,518 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh -209,716 -231,450 -230,224 -241,400 -250,334 -334,410 -481,617 -35,040 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh -224,337 -480,799 -501,287 -528,579 -550,931 -569,823 -574,551 -503,000 -497,287 -477,910 -441,935 -363,945 -317,106 -283,832 -221,219 -221,306 -218,481 -292,096	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -620,320 -626,324 -551,382 -545,687 -522,862 -481,174 -396,189 -343,866 -305,774 -236,229 -221,301 -218,490 -292,096	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -639,515 -699,164 -35,037 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0 38.5 41.3 43.8 45.9 47.2 47.7 47.5 47.0	34.5 33.0 31.8 30.9 30.1 29.6 30.3 31.6 33.0 34.8 36.5 38.1 39.5 40.4 40.2 39.8 39.9	Htg Btuh -195,956 -338,694 -512,565 -540,990 -557,268 -560,286 -544,984 -4,518 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh -209,716 -231,450 -230,224 -241,400 -250,334 -334,410 -481,617 -35,040 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh -224,337 -480,799 -501,287 -528,579 -550,931 -569,823 -574,551 -503,000 -497,287 -477,910 -441,935 -363,945 -317,106 -283,832 -221,219 -221,306 -218,481 -292,096 -280,674	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -620,320 -626,324 -551,382 -545,687 -522,862 -481,174 -396,189 -343,866 -305,774 -236,229 -221,301 -218,490 -292,096 -280,674	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -639,515 -699,164 -35,037 0 0 0 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0 38.5 41.3 43.8 45.9 47.2 47.7 47.5 47.0	34.5 33.0 31.8 30.9 30.1 29.6 30.3 31.6 33.0 34.8 36.5 38.1 39.5 40.4 40.2 39.8 39.9	Htg Btuh -195,956 -338,694 -512,565 -540,990 -557,268 -560,286 -544,984 -4,518 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh -209,716 -231,450 -230,224 -241,400 -250,334 -334,410 -481,617 -35,040 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh -224,337 -480,799 -501,287 -528,579 -550,931 -569,823 -574,551 -503,000 -497,287 -477,910 -441,935 -363,945 -317,106 -283,832 -221,219 -221,306 -218,481 -292,096 -280,674 -303,346	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -620,320 -626,324 -551,382 -545,687 -522,862 -481,174 -396,189 -343,866 -305,774 -236,229 -221,301 -218,490 -292,096 -280,674 -303,346	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -639,515 -699,164 -35,037 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0 38.5 41.3 43.8 45.9 47.2 47.7 47.5 47.0 46.2 45.1	34.5 33.0 31.8 30.9 30.1 29.6 30.3 31.6 33.0 34.8 36.5 38.1 39.5 40.4 40.2 39.8 39.9 39.7 39.2	Htg Btuh -195,956 -338,694 -512,565 -540,990 -557,266 -560,286 -544,984 -4,518 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh -209,716 -231,450 -230,224 -241,400 -250,334 -334,410 -481,617 -35,040 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh -224,337 -480,799 -501,287 -528,579 -550,931 -569,823 -574,551 -503,000 -497,287 -477,910 -441,935 -363,945 -317,106 -283,832 -221,219 -221,306 -218,481 -292,096 -280,674 -303,346 -331,482	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -620,320 -626,324 -551,382 -545,687 -522,862 -481,174 -396,189 -343,866 -305,774 -236,229 -221,301 -218,490 -292,096 -280,674 -303,346 -331,482	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -639,515 -699,164 -35,037 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0 38.5 41.3 43.8 45.9 47.2 47.7 47.5 47.0 46.2 45.1	34.5 33.0 31.8 30.9 30.1 29.6 30.3 31.6 33.0 34.8 36.5 38.1 39.5 40.4 40.6 40.2 39.8 39.9 39.7 39.2 38.3	Htg Btuh -195,956 -338,694 -512,565 -540,990 -557,268 -560,286 -544,984 -4,518 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh -209,716 -231,450 -230,224 -241,400 -250,334 -334,410 -481,617 -35,040 0 0 0 0 0 0 0 0 -22,033 -54,909	Clg Ton	Htg Btuh -224,337 -480,799 -501,287 -528,579 -550,931 -569,823 -574,551 -503,000 -497,287 -477,910 -441,935 -363,945 -317,106 -283,832 -221,219 -221,306 -218,481 -292,096 -280,674 -303,346 -331,482 -364,190	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -620,320 -626,324 -551,382 -545,687 -522,862 -481,174 -396,189 -343,866 -305,774 -236,229 -221,301 -218,490 -292,096 -280,674 -303,346 -331,482 -364,190	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -639,515 -699,164 -35,037 0 0 0 0 0 0 0 0 -22,033 -54,909	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0 38.5 41.3 43.8 45.9 47.2 47.7 47.5 47.0 46.2 45.1 43.8 42.3	34.5 33.0 31.8 30.9 30.1 29.6 30.3 31.6 33.0 34.8 36.5 38.1 39.5 40.4 40.2 39.8 39.9 39.7 39.2	Htg Btuh -195,956 -338,694 -512,565 -540,990 -557,266 -560,286 -544,984 -4,518 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh -209,716 -231,450 -230,224 -241,400 -250,334 -334,410 -481,617 -35,040 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh -224,337 -480,799 -501,287 -528,579 -550,931 -569,823 -574,551 -503,000 -497,287 -477,910 -441,935 -363,945 -317,106 -283,832 -221,219 -221,306 -218,481 -292,096 -280,674 -303,346 -331,482	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -620,320 -626,324 -551,382 -545,687 -522,862 -481,174 -396,189 -343,866 -305,774 -236,229 -221,301 -218,490 -292,096 -280,674 -303,346 -331,482	Clg Ton	Htg Btuh -486,246 -528,705 -545,408 -575,596 -599,878 -639,515 -699,164 -35,037 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton

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March			Desi	lgn	Weeko	lay	Satu	ırday	Sund	lay	Mond	av
Hour	OADB	OAWB	Htg Btuh		Htg Btuh		Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Cla Ton
1	45.4	41.6	-185,393	0.0	0	0.0	0	0.0	-218,375	0.0	-234,822	0.0
2	43.3	39.7	-201,204	0.0	0	0.0	0	0.0	-243,440	0.0	-322,581	0.0
3	41.6	38.6	-249,004	0.0	0	0.0	0	0.0	-266,622	0.0	-360,739	0.0
4	40.6	37.5	-339,254	0.0	0	0.0	-51,245	0.0	-277,378	0.0	-411,930	0.0
5	40.2	37.3	-359,729	0.0	-6,852	0.0	-64,849	0.0	-322,688	0.0	-438,243	0.0
6	40.6	37.8	-364,534	0.0	-63,999	0.0	-150,560	0.0	-408,285	0.0	-441,996	0.0
7	41.6	39.0	-215,482	0.0	-55,746	0.0	-136,288	0.0	-327,323	0.0	-355,286	0.0
8	43.3	40.7	0	0.0	0	0.0	-121,813	0.0	-302,380	0.0	0	0.0
9	45.4	42.5	0	0.0	0	0.0	-125,899	0.0	-292,270	0.0	0	0.0
10	47.9	44.3	0	0.0	0	0.0	-137,685	0.0	-276,853	0.0	0	0.0
11	50.6	45.5	0	0.0	0	0.0	-86,074	0.0	-182,390	0.0	0	0.0
12	53.3	46.8	0	0.0	0	0.0	-37,677	0.0	-94,567	0.0	0	0.0
13	55.8	48.5	0	0.0	0	0.0	-17,808	0.0	-45,277	0.0	0	0.0
14	58.0	49.6	0	0.0	0	0.0	0	0.0	-6,355	0.0	0	0.0
15	59.6	50.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
16	60.7	50.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
17	61.0	50.9	0	0.0	0	0.0	-2,562	0.0	-2,562	0.0	0	0.0
18	60.7	50.7	0	0.0	0	0.0	-21,448	0.0	-21,448	0.0	0	0.0
19	59.6	50.7	0	0.0	0	0.0	-56,054	0.0	-56,054	0.0	0	0.0
20	58.0	50.5	0	0.0	0	0.0	-58,531	0.0	-58,531	0.0	0	0.0
21	55.8	49.4	0	0.0	0	0.0	-67,601	0.0	-67,601	0.0	0	0.0
22	53.3	47.8	0	0.0	0	0.0	-94,437	0.0	-94,437	0.0	0	0.0
23	50.6	45.9	0	0.0	-1,103	0.0	-114,302	0.0	-138,378	0.0	-1,103	0.0
24	47.9	43.8	0	0.0	0	0.0	-136,227	0.0	-183,759	0.0	0	0.0
April			Desi	.gn	Weekd	lay	Satu	rday	Sund	ay	Mond	ay
April Hour	OADB	OAWB	Desi Htg Btuh	•	Weekd Htg Btuh	-	Satu Htg Btuh	-	Sund Htg Btuh	-	Mond	-
-	OADB 57.7			•		-		-		-		-
Hour		53.9	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton
Hour 1	57.7	53.9 52.7	Htg Btuh O	Clg Ton 0.0	Htg Btuh O	Clg Ton 0.0	Htg Btuh O	Clg Ton 0.0	Htg Btuh O	Clg Ton 0.0	Htg Btuh O	Clg Ton
Hour 1 2	57.7 55.9	53.9 52.7 51.3	Htg Btuh O O	Clg Ton 0.0 0.0	Htg Btuh 0 0	Clg Ton 0.0 0.0	Htg Btuh O O	0.0 0.0	Htg Btuh 0 0	Clg Ton 0.0 0.0	Htg Btuh 0 0 0 -18,096	Clg Ton
Hour 1 2 3	57.7 55.9 54.2	53.9 52.7 51.3 50.2	Htg Btuh 0 0 0	Clg Ton 0.0 0.0 0.0	Htg Btuh 0 0 0	Clg Ton 0.0 0.0 0.0	Htg Btuh O O O	Clg Ton 0.0 0.0 0.0	Htg Btuh 0 0 0	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 -18,096 -36,565	Clg Ton 0. 0. 0.
Hour 1 2 3 4	57.7 55.9 54.2 52.9	53.9 52.7 51.3 50.2 49.6	Htg Btuh 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh O O O	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 -18,096 -36,565 -63,104	Clg Ton 0.0 0.0
Hour 1 2 3 4 5	57.7 55.9 54.2 52.9 51.9	53.9 52.7 51.3 50.2 49.6 49.2	Htg Btuh 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 -18,096 -36,565	Clg Ton 0.00 0.00 0.00 0.0
Hour 1 2 3 4 5 6	57.7 55.9 54.2 52.9 51.9 51.2	53.9 52.7 51.3 50.2 49.6 49.2	Htg Btuh 0 0 0 0 0 -10,419	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 -18,096 -36,565 -63,104	Clg Ton 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6 7	57.7 55.9 54.2 52.9 51.9 51.2 51.0	53.9 52.7 51.3 50.2 49.6 49.2 49.3	Htg Btuh 0 0 0 0 0 0 -10,419	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 -18,096 -36,565 -63,104 -32,981	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6 7 8	57.7 55.9 54.2 52.9 51.9 51.2 51.0 51.6	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6	Htg Btuh 0 0 0 0 0 0 -10,419 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 -18,096 -36,565 -63,104 -32,981	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6 7 8	57.7 55.9 54.2 52.9 51.9 51.2 51.0 51.6 53.3	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8	Htg Btuh 0 0 0 0 0 -10,419 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh 0 0 -18,096 -36,565 -63,104 -32,981 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10	57.7 55.9 54.2 52.9 51.9 51.2 51.0 51.6 53.3 55.9	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4	Htg Btuh 0 0 0 0 0 0 0 -10,419 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 -18,096 -36,565 -63,104 -32,981 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11	57.7 55.9 54.2 52.9 51.9 51.2 51.0 51.6 53.3 55.9 59.0	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4 55.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 -18,096 -36,565 -63,104 -32,981 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12	57.7 55.9 54.2 52.9 51.2 51.0 51.6 53.3 55.9 59.0 62.4	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4 55.6 57.7	Htg Btuh 0 0 0 0 0 -10,419 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 -18,096 -36,565 -63,104 -32,981 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13	57.7 55.9 54.2 52.9 51.9 51.2 51.0 51.6 53.3 55.9 59.0 62.4 65.5	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4 55.6 57.7	Htg Btuh 0 0 0 0 0 -10,419 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 -18,096 -36,565 -63,104 -32,981 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14	57.7 55.9 54.2 52.9 51.9 51.2 51.0 51.6 53.3 55.9 59.0 62.4 65.5 68.1	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4 55.6 57.7 59.4 60.7	Htg Btuh 0 0 0 0 0 -10,419 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 -18,096 -36,565 -63,104 -32,981 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	57.7 55.9 54.2 52.9 51.9 51.0 51.6 53.3 55.9 62.4 65.5 68.1 69.8	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4 55.6 57.7 59.4 60.7 60.9	Htg Btuh 0 0 0 0 0 0 0 -10,419 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 -18,096 -36,565 -63,104 -32,981 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	57.7 55.9 54.2 52.9 51.9 51.0 51.6 53.3 55.9 62.4 65.5 68.1 69.8 70.4	53.9 52.7 51.3 50.2 49.6 49.2 49.9 50.6 51.8 53.4 55.6 57.7 60.9 60.2	Htg Btuh 0 0 0 0 0 0 -10,419 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 -18,096 -36,565 -63,104 -32,981 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	57.7 55.9 54.2 52.9 51.9 51.6 53.3 55.9 59.0 62.4 65.5 68.1 69.8 70.4 70.2	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4 55.6 57.7 59.4 60.7 60.9 60.2 60.1	Htg Btuh 0 0 0 0 0 0 -10,419 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 -18,096 -36,565 -63,104 -32,981 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	57.7 55.9 54.2 52.9 51.9 51.6 53.3 55.9 59.0 62.4 65.5 68.1 70.2 69.5	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4 55.6 57.7 59.4 60.7 60.9 60.2 60.1	Htg Btuh 0 0 0 0 0 0 -10,419 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 -18,096 -36,565 -63,104 -32,981 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	57.7 55.9 54.2 52.9 51.9 51.0 53.3 55.9 59.0 62.4 65.5 68.1 69.8 70.4 69.5 68.5 68.5	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4 55.6 57.7 59.4 60.7 60.9 60.2 60.1 59.4	Htg Btuh 0 0 0 0 0 0 0 -10,419 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 -18,096 -36,565 -63,104 -32,981 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	57.7 55.9 54.2 52.9 51.9 51.0 53.3 55.9 59.0 62.4 65.5 68.1 69.8 70.4 69.5 68.5 68.5	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4 55.6 57.7 59.4 60.7 60.2 60.1 59.4 59.7 59.3	Htg Btuh 0 0 0 0 0 0 0 -10,419 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 -18,096 -36,565 -63,104 -32,981 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	57.7 55.9 54.2 52.9 51.9 51.0 51.6 53.3 55.9 59.0 62.4 65.5 68.1 69.8 70.4 70.2 69.5 68.5	53.9 52.7 51.3 50.2 49.6 49.2 49.3 50.6 51.8 53.4 55.6 57.7 59.4 60.7 60.9 60.2 59.4 59.7 59.3 58.8	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 -18,096 -36,565 -63,104 -32,981 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	57.7 55.9 54.2 52.9 51.9 51.0 51.6 53.3 55.9 59.0 62.4 65.5 68.1 69.8 70.4 70.2 69.5 67.2 65.5 63.7	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4 55.7 57.7 59.4 60.7 60.9 60.2 60.1 59.4 59.3 59.3 59.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.

Trane Air Conditioning Economics
By: Trane Customer Direct Service Network

May			Desi	gn	Weekd	lay	Satu	rdav	Sund	av	Mond	av
Hour	OADB	OAWB	Htg Btuh	Clq Ton	Htg Btuh	-	Htg Btuh		Htg Btuh	-	Htg Btuh	
1	66.6	62.3	0	243.1	0	17.3	0	18.6	0	18.6	0	18.6
2	64.5	60.4	0	198.2	0	13.1	0	13.6	0	13.6	Ö	13.6
3	62.7	59.1	0	165.2	0	10.0	Ō	10.1	0	10.1	Ö	10.1
4	61.2	58.1	0	136.5	0	8.0	0	8.0	0	8.0	ŏ	8.0
5	60.0		0	115.8	0	6.4	0	6.4	0	6.4	Ö	6.4
6	59.3	56.6	0	25.6	0	10.5	0	10.6	0	10.6	0	10.6
7	59.0	56.5	0	36.8	0	12.5	0	12.5	ō	12.5	ŏ	12.5
8	59.5	56.6	0	109.1	0	45.2	0	13.4	ō	13.4	0	46.0
9	60.9		0	138.1	0	81.5	ō	13.9	ō	13.9	0	81.4
10	63.0	57.2	0	142.8	0	100.4	ō	18.0	ō	18.0	0	100.6
11	65.7	58.1	ō	149.5	0	104.9	ō	19.7	o	19.7	0	104.9
12		59.8	0	158.2	0	109.0	ō	22.6	o	22.6	0	109.0
13	71.7	61.6	ō	144.7	Ö	96.4	ŏ	30.6	ŏ	30.6	0	96.4
14	74.5	63.4	ō	181.8	ō	130.8	0	40.6	ő	40.6	0	130.8
15	76.6	64.8	0	192.5	0	144.7	0	52.0	o	52.0	0	
16	78.0	65.6	0	194.0	0	147.5	0	60.1	0		0	144.8
17		65.6	0	162.3	0		•		0	60.1	-	147.5
18	78.2		0		_	124.8	0	61.7	_	61.7	0	124.8
19			0	114.7	0	84.8	0	56.8	0	56.8	0	84.8
20		65.6	0	68.3	0	48.0	0	48.1	0	48.1	0	48.0
		66.1	-	60.2	0	45.1	0	45.1	0	45.1	0	45.1
21		67.2	0	51.2	0	41.1	0	41.1	0	41.1	0	41.1
22		66.4	0	42.2	0	35.2	0	35.2	0	35.2	0	35.2
23		65.4	0	34.9	0	28.8	0	28.8	0	28.8	0	28.8
24	68.7	64.0	0	28.1	0	23.7	0	23.7	0	23.7	0	23.7
June			Desi	-	Weekd		Satu	rday	Sund	ay	Mond	ay
June Hour	OADB	OAWB	Desi Htg Btuh	-	Weekd Htg Btuh		Satu Htg Btuh	_	Sund	_	Mond Htg Btuh	
		OAWB 67.9		-				_		_		
Hour	73.0		Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton
Hour 1	73.0 71.2 69.7	67.9 66.1 65.2	Htg Btuh O	Clg Ton 52.2	Htg Btuh O	Clg Ton 33.8	Htg Btuh O	Clg Ton 37.5	Htg Btuh O	Clg Ton 37.5	Htg Btuh 0	Clg Ton 37.5
Hour 1 2	73.0 71.2 69.7	67.9 66.1	Htg Btuh 0 0	Clg Ton 52.2 47.1	Htg Btuh O O	Clg Ton 33.8 28.9	Htg Btuh O O	Clg Ton 37.5 30.8	Htg Btuh O O	Clg Ton 37.5 30.8	Htg Btuh 0 0	Clg Ton 37.5 30.8
Hour 1 2 3	73.0 71.2 69.7 68.5	67.9 66.1 65.2	Htg Btuh 0 0 0	Clg Ton 52.2 47.1 42.7	Htg Btuh O O O	Clg Ton 33.8 28.9 24.7	Htg Btuh O O O	Clg Ton 37.5 30.8 25.4	Htg Btuh 0 0 0	Clg Ton 37.5 30.8 25.4	Htg Btuh 0 0 0	Clg Ton 37.5 30.8 25.4
Hour 1 2 3 4	73.0 71.2 69.7 68.5 67.8	67.9 66.1 65.2 64.3	Htg Btuh 0 0 0 0	Clg Ton 52.2 47.1 42.7 39.7	Htg Btuh 0 0 0 0	Clg Ton 33.8 28.9 24.7 20.6	Htg Btuh 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9	Htg Btuh 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9	Htg Btuh 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9
Hour 1 2 3 4 5	73.0 71.2 69.7 68.5 67.8	67.9 66.1 65.2 64.3	Htg Btuh 0 0 0 0	Clg Ton 52.2 47.1 42.7 39.7 37.4	Htg Btuh 0 0 0 0 0	Clg Ton 33.8 28.9 24.7 20.6 18.5	Htg Btuh 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7	Htg Btuh 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7	Htg Btuh 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7
Hour 1 2 3 4 5 6 7 8	73.0 71.2 69.7 68.5 67.8 67.6 68.1	67.9 66.1 65.2 64.3 64.2	Htg Btuh 0 0 0 0 0 0	Clg Ton 52.2 47.1 42.7 39.7 37.4 56.4	Htg Btuh 0 0 0 0 0 0	Clg Ton 33.8 28.9 24.7 20.6 18.5 25.0	Htg Btuh 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1	Htg Btuh 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1	Htg Btuh 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1
Hour 1 2 3 4 5 6 7	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4	67.9 66.1 65.2 64.3 64.2 64.2	Htg Btuh 0 0 0 0 0 0	Clg Ton 52.2 47.1 42.7 39.7 37.4 56.4 72.3	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton 33.8 28.9 24.7 20.6 18.5 25.0 33.3	Htg Btuh 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8	Htg Btuh 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8
Hour 1 2 3 4 5 6 7 8	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6	67.9 66.1 65.2 64.3 64.2 64.2 64.8 65.7	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 52.2 47.1 42.7 39.7 37.4 56.4 72.3 150.3	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 33.8 28.9 24.7 20.6 18.5 25.0 33.3 110.6	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6	######################################	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 113.4
Hour 1 2 3 4 5 6 7 8 9	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6	67.9 66.1 65.2 64.3 64.2 64.2 64.8 65.7 66.2 67.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 52.2 47.1 42.7 39.7 37.4 56.4 72.3 150.3 184.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 33.8 28.9 24.7 20.6 18.5 25.0 33.3 110.6 143.0	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1	######################################	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 113.4 142.9
Hour 1 2 3 4 5 6 7 8 9 10	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2	67.9 66.1 65.2 64.3 64.2 64.2 64.8 65.7 66.2 67.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 52.2 47.1 42.7 39.7 37.4 56.4 72.3 150.3 184.6 186.3	Htg Btuh	Clg Ton 33.8 28.9 24.7 20.6 18.5 25.0 33.3 110.6 143.0 154.4	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8	Htg Htuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 113.4 142.9 154.4
Hour 1 2 3 4 5 6 7 8 9 10 11	73.0 71.2 69.7 68.5 67.6 68.1 69.4 71.6 74.2 77.2	67.9 66.1 65.2 64.3 64.2 64.2 64.8 65.7 66.2 67.2 68.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 52.2 47.1 42.7 39.7 37.4 56.4 72.3 150.3 184.6 186.3 195.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 33.8 28.9 24.7 20.6 18.5 25.0 33.3 110.6 143.0 154.4 155.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0	Htg Htuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 113.4 142.9 154.4 155.7
Hour 1 2 3 4 5 6 7 8 9 10 11 12	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2 80.2 82.8	67.9 66.1 65.2 64.3 64.2 64.2 64.8 65.7 66.2 67.2 68.5 70.0	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 52.2 47.1 42.7 39.7 37.4 56.4 72.3 150.3 184.6 186.3 195.3 204.0	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 33.8 28.9 24.7 20.6 18.5 25.0 33.3 110.6 143.0 154.4 155.7 163.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5	Htg Htuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 113.4 142.9 154.4 155.7 163.6
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2 80.2 82.8 85.0	67.9 66.1 65.2 64.3 64.2 64.2 64.8 65.7 66.2 67.2 68.5 70.0 70.8	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 52.2 47.1 42.7 39.7 37.4 56.4 72.3 150.3 184.6 186.3 195.3 204.0 185.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 33.8 28.9 24.7 20.6 18.5 25.0 33.3 110.6 143.0 154.4 155.7 163.6 147.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8	Htg Htuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 113.4 142.9 154.4 155.7 163.6 147.7
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2 80.2 82.8 85.0 86.3	67.9 66.1 65.2 64.3 64.2 64.2 64.8 65.7 66.2 67.2 68.5 70.0 70.8 71.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 52.2 47.1 42.7 39.7 37.4 56.4 72.3 150.3 184.6 186.3 195.3 204.0 185.5 228.0	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 33.8 28.9 24.7 20.6 18.5 25.0 33.3 110.6 143.0 154.4 155.7 163.6 147.7 190.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8 96.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8 96.2	######################################	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 113.4 142.9 154.4 155.7 163.6 147.7 190.7
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2 80.2 82.8 85.0 86.3 86.8	67.9 66.1 65.2 64.3 64.2 64.2 64.8 65.7 66.2 67.2 67.0 70.8 71.6 72.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 52.2 47.1 42.7 39.7 37.4 56.4 72.3 150.3 184.6 186.3 195.3 204.0 185.5 228.0 235.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 33.8 28.9 24.7 20.6 18.5 25.0 33.3 110.6 143.0 154.4 155.7 163.6 147.7 190.7 200.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8 96.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8 96.2 105.7	######################################	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 113.4 142.9 154.4 155.7 163.6 147.7 190.7 200.3
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2 80.2 82.8 85.0 86.3 86.8	67.9 66.1 65.2 64.3 64.2 64.8 65.7 66.2 67.2 68.5 70.0 71.6 72.3 72.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 52.2 47.1 42.7 39.7 37.4 56.4 72.3 150.3 184.6 186.3 195.3 204.0 185.5 228.0 235.1 234.4	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 33.8 28.9 24.7 20.6 18.5 25.0 33.3 110.6 143.0 154.4 155.7 163.6 147.7 190.7 200.3 199.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8 96.2 105.7 103.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8 96.2 105.7 103.9	Htg Htuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 113.4 142.9 154.4 155.7 163.6 147.7 190.7 200.3 199.5
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2 80.2 82.8 85.0 86.3 86.8	67.9 66.1 65.2 64.3 64.2 64.8 65.7 66.2 67.2 68.5 70.0 70.8 71.6 72.3 72.1 71.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 52.2 47.1 42.7 39.7 37.4 56.4 72.3 150.3 184.6 186.3 195.3 204.0 185.5 228.0 235.1 234.4 196.8	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 33.8 28.9 24.7 20.6 18.5 25.0 33.3 110.6 143.0 154.4 155.7 163.6 147.7 190.7 200.3 199.5 165.0	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8 96.2 105.7 103.9 97.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8 96.2 105.7 103.9 97.6	######################################	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 113.4 142.9 154.4 155.7 163.6 147.7 190.7 200.3 199.5 165.0
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	73.0 71.2 69.7 68.5 67.8 67.8 67.1 69.4 71.6 74.2 77.2 80.2 82.8 85.0 86.3 86.6 85.8 84.7	67.9 66.1 65.2 64.3 64.2 64.8 65.7 66.2 67.2 68.5 70.0 70.8 71.6 72.3 72.1 71.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 52.2 47.1 42.7 39.7 37.4 56.4 72.3 150.3 184.6 186.3 195.3 204.0 185.5 228.0 235.1 234.4 196.8 145.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 33.8 28.9 24.7 20.6 18.5 25.0 33.3 110.6 143.0 154.4 155.7 163.6 147.7 190.7 200.3 199.5 165.0 121.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8 96.2 105.7 103.9 97.6 92.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8 96.2 105.7 103.9 97.6 92.3	Htg Htuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 113.4 142.9 154.4 155.7 163.6 147.7 190.7 200.3 199.5 165.0 121.3
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	73.0 71.2 69.7 68.5 67.8 67.8 67.1 69.4 71.6 74.2 77.2 80.2 82.8 85.0 86.3 86.6 85.8 84.7	67.9 66.1 65.2 64.3 64.2 64.2 64.8 65.7 66.2 67.2 68.5 70.0 70.8 71.6 72.3 71.7 71.5 71.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 52.2 47.1 42.7 39.7 37.4 56.4 72.3 150.3 184.6 186.3 195.3 204.0 185.5 228.0 235.1 234.4 196.8 145.3 96.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 33.8 28.9 24.7 20.6 18.5 25.0 33.3 110.6 143.0 154.4 155.7 163.6 147.7 190.7 200.3 199.5 165.0 121.3 77.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8 96.2 105.7 103.9 97.6 92.3 78.8 77.0	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8 96.2 105.7 103.9 97.6 92.3 78.8	Htg Htuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C1g Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 113.4 142.9 154.4 155.7 163.6 147.7 190.7 200.3 199.5 165.0 121.3 77.3 76.2
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	73.0 71.2 69.7 68.5 67.8 67.6 68.1 671.6 74.2 77.2 80.2 85.0 86.3 86.3 86.6 85.8 84.7	67.9 66.1 65.2 64.3 64.2 64.2 64.8 65.7 66.2 67.2 68.5 70.0 70.8 71.6 72.3 72.1 71.7 71.5 71.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 52.2 47.1 42.7 39.7 37.4 56.4 72.3 150.3 184.6 186.3 195.3 204.0 185.5 228.0 235.1 234.4 196.8 145.3 96.2 88.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 33.8 28.9 24.7 20.6 18.5 25.0 33.3 110.6 143.0 154.4 155.7 163.6 147.7 190.7 200.3 199.5 165.0 121.3 77.3 76.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8 96.2 105.7 103.9 97.6 92.3 78.8 77.0 69.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8 96.2 105.7 103.9 97.6 92.3 78.8 77.0	Htg Htuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 113.4 142.9 154.4 155.7 163.6 147.7 200.3 199.5 165.0 121.3 77.3
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.2 80.2 85.0 86.3 86.8 85.8 84.7 83.2 81.4	67.9 66.1 65.2 64.3 64.2 64.8 65.7 66.2 67.2 68.5 70.8 71.6 72.3 72.1 71.7 71.5 71.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 52.2 47.1 42.7 39.7 37.4 56.4 72.3 150.3 184.6 186.3 195.3 204.0 185.5 228.0 235.1 234.4 196.8 145.3 96.2 88.2 79.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8 96.2 105.7 103.9 97.6 92.3 78.8 77.0 69.1 61.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8 96.2 105.7 103.9 97.6 92.3 78.8 77.0 69.1 61.1	######################################	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 113.4 142.9 154.4 155.7 163.6 147.7 190.7 200.3 199.5 165.0 121.3 77.3 76.2 68.9 61.1
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2 80.2 85.0 86.3 86.8 85.8 84.7 83.2 81.4 79.3 77.2	67.9 66.1 65.2 64.3 64.2 64.8 65.7 66.2 67.2 68.5 70.8 71.6 72.3 72.1 71.7 71.5 71.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 52.2 47.1 42.7 39.7 37.4 56.4 72.3 150.3 184.6 186.3 195.3 204.0 185.5 228.0 235.1 234.4 196.8 145.3 96.2 88.2 79.6 70.4	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8 96.2 105.7 103.9 97.6 92.3 78.8 77.0 69.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 40.6 46.1 59.8 62.0 70.5 83.8 96.2 105.7 103.9 97.6 92.3 78.8 77.0 69.1	######################################	Clg Ton 37.5 30.8 25.4 20.9 18.7 25.1 33.8 113.4 142.9 154.4 155.7 163.6 147.7 190.7 200.3 199.5 165.0 121.3 77.3 76.2 68.9

Trane Air Conditioning Economics
By: Trane Customer Direct Service Network

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July			Desi	gn	Weekd	lay	Satu	ırdav	Sund	av	Mond	
Hour	OADB	OAWB	Htg Btuh	_	Htg Btuh		Htg Btuh	-	Htg Btuh		Htg Btuh	Cla mo-
1	72.0	69.3	0	54.1	0	31.8	0	36.8	0	36.8	0	36.8
2	70.5	68.0	0	47.4	0	28.1	0	30.1	ō	30.1	0	30.1
3	69.4	67.1	0	42.9	ō	24.7	ō	25.3	ō	25.3	0	
4		66.4	0	40.2	ō	21.8	ō	22.0	ō	22.0	0	25.3 22.0
5	67.9	66.0	ō	37.9	ō	19.8	ō	19.8	Ö	19.8	0	
6		65.9	0	52.0	o	24.1	0	24.1	ō	24.1	0	19.8 24.1
7		66.3	ō	72.6	ō	33.2	ō	33.4	ō	33.4	0	33.4
8		67.3	ō	157.0	ō	120.6	ō	43.4	ō	43.4	0	121.9
9		68.0	o	184.5	0	147.6	ō	49.3	Ö	49.3	0	147.3
10		69.1	o	190.3	ō	156.8	ō	60.5	ő	60.5	0	156.9
11		70.5	Ö	196.9	Ö	158.3	Ö	63.0	ő	63.0	0	158.3
12		71.7	0	204.5	ō	164.2	0	70.9	ő	70.9	0	164.2
13		72.7	0	187.1	Ö	145.0	0	82.0	Ö	82.0	0	145.0
14		73.5	0	228.0	0	191.7	0	94.4	0		_	
15		73.7	0	235.2	0	191.7	0		0	94.4	0	191.7
			_		-		_	103.8	-	103.8	0	199.0
16		73.5	0	234.3	0	197.6	0	101.2	0	101.2	0	197.6
17		73.1	0	195.7	0	161.2	0	93.6	0	93.6	0	161.2
18		72.6	0	141.5	0	116.5	0	88.9	0	88.9	0	116.5
19		73.2	0	91.0	0	73.5	0	76.4	0	76.4	0	73.5
20		73.8	0	85.9	0	73.9	0	74.3	0	74.3	0	73.9
21		73.9	0	77.0	0	70.0	0	70.0	0	70.0	0	70.0
22		73.1	0	68.4	0	61.6	0	61.7	0	61.7	0	61.6
23		71.9	0	61.8	0	52.5	0	52.5	0	52.5	0	52.5
24	73.5	70.8	0	55.9	0	45.1	0	45.1	0	45.1	0	45.1
August			Desi	•	Weekd	_	Satu		Sund	-	Mond	
Hour	OADB		Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton
Hour 1	OADB 72.7	70.2	Htg Btuh O	Clg Ton 58.2	Htg Btuh O	Clg Ton 33.1	Htg Btuh O	Clg Ton 39.0	Htg Btuh O	Clg Ton 39.0	Htg Btuh O	Clg Ton
Hour 1 2	OADB 72.7 71.2	70.2 69.0	Htg Btuh 0 0	Clg Ton 58.2 48.0	Htg Btuh 0 0	Clg Ton 33.1 30.8	Htg Btuh O O	Clg Ton 39.0 32.8	Htg Btuh 0 0	Clg Ton 39.0 32.8	Htg Btuh 0 0	Clg Ton 39 32
Hour 1 2 3	OADB 72.7 71.2 69.9	70.2 69.0 68.0	Htg Btuh 0 0 0	Clg Ton 58.2 48.0 42.1	Htg Btuh O O O	Clg Ton 33.1 30.8 26.9	Htg Btuh 0 0 0	Clg Ton 39.0 32.8 27.3	Htg Btuh O O O	Clg Ton 39.0 32.8 27.3	Htg Btuh O O O	Clg Ton 39 32 27.3
Hour 1 2 3 4	OADB 72.7 71.2 69.9 68.8	70.2 69.0 68.0 67.1	Htg Btuh O O O	Clg Ton 58.2 48.0 42.1 38.9	Htg Btuh O O O	Clg Ton 33.1 30.8 26.9 23.2	Htg Btuh 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3	Htg Btuh 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3	Htg Btuh O O O	Clg Ton 39 32 27.5 23.3
Hour 1 2 3 4 5	OADB 72.7 71.2 69.9 68.8 68.0	70.2 69.0 68.0 67.1 66.6	Htg Btuh 0 0 0 0 0	Clg Ton 58.2 48.0 42.1 38.9 36.6	Htg Btuh 0 0 0 0 0	Clg Ton 33.1 30.8 26.9 23.2 19.8	Htg Btuh 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9	Htg Btuh 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9	Htg Btuh 0 0 0 0 0	Clg Ton 39 32 27.3 23.3 19.9
Hour 1 2 3 4 5 6	OADB 72.7 71.2 69.9 68.8 68.0 67.5	70.2 69.0 68.0 67.1 66.6 66.2	Htg Btuh 0 0 0 0 0 0	Clg Ton 58.2 48.0 42.1 38.9 36.6 42.3	Htg Btuh 0 0 0 0 0 0	Clg Ton 33.1 30.8 26.9 23.2 19.8 20.7	Htg Btuh	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7	Htg Btuh 0 0 0 0 0 0 0 0	39.0 32.8 27.3 23.3 19.9 20.7	Htg Btuh 0 0 0 0 0 0	Clg Ton 39 32 27.5 23.3 19.9 20.7
Hour 1 2 3 4 5	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3	70.2 69.0 68.0 67.1 66.6 66.2 66.1	Htg Btuh 0 0 0 0 0	Clg Ton 58.2 48.0 42.1 38.9 36.6 42.3 69.1	Htg Btuh 0 0 0 0 0	33.1 30.8 26.9 23.2 19.8 20.7 29.3	Htg Btuh 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3	Htg Btuh 0 0 0 0 0	39.0 32.8 27.3 23.3 19.9 20.7 29.3	Htg Btuh 0 0 0 0 0 0	Clg Ton 39 32 27. 23.3 19.9 20.7 29.3
Hour 1 2 3 4 5 6 7 8	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3	70.2 69.0 68.0 67.1 66.6 66.2	Htg Btuh	Clg Ton 58.2 48.0 42.1 38.9 36.6 42.3	Htg Btuh 0 0 0 0 0 0	Clg Ton 33.1 30.8 26.9 23.2 19.8 20.7 29.3 112.3	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 39 32 27.5 23.3 19.9 20.7 29.3 114.9
Hour 1 2 3 4 5 6 7 8 9	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 58.2 48.0 42.1 38.9 36.6 42.3 69.1 153.3 184.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	33.1 30.8 26.9 23.2 19.8 20.7 29.3 112.3	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton 39 32 27.5 23.3 19.9 20.7 29.3 114.9 139.6
Hour 1 2 3 4 5 6 7 8	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8	Htg Btuh	Clg Ton 58.2 48.0 42.1 38.9 36.6 42.3 69.1 153.3	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 33.1 30.8 26.9 23.2 19.8 20.7 29.3 112.3 139.1 144.3	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39 32 27.5 23.3 19.9 20.7 29.3 114.9 139.6 144.2
Hour 1 2 3 4 5 6 7 8 9 10 11	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 58.2 48.0 42.1 38.9 36.6 42.3 69.1 153.3 184.3 188.5 195.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 33.1 30.8 26.9 23.2 19.8 20.7 29.3 112.3 139.1 144.3 149.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	20.7 20.7 20.7 20.7 20.7 20.7 20.7 20.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39 32 27.5 23.3 19.9 20.7 29.3 114.9 139.6 144.2 149.9
Hour 1 2 3 4 5 6 7 8 9 10 11 12	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7 70.0	Htg Btuh	Clg Ton 58.2 48.0 42.1 38.9 36.6 42.3 69.1 153.3 184.3 188.5 195.2 202.4	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 33.1 30.8 26.9 23.2 19.8 20.7 29.3 112.3 139.1 144.3 149.9 159.8	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0	39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39 32 27.5 23.3 19.9 20.7 29.3 114.9 139.6 144.2 149.9 159.8
Hour 1 2 3 4 5 6 7 8 9 10 11	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7 70.0	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 58.2 48.0 42.1 38.9 36.6 42.3 69.1 153.3 184.3 188.5 195.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 33.1 30.8 26.9 23.2 19.8 20.7 29.3 112.3 139.1 144.3 149.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	20.7 20.7 20.7 20.7 20.7 20.7 20.7 20.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39 32 27.5 23.3 19.9 20.7 29.3 114.9 139.6 144.2 149.9
Hour 1 2 3 4 5 6 7 8 9 10 11 12	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5 79.1	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7 70.0	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 58.2 48.0 42.1 38.9 36.6 42.3 69.1 153.3 184.3 188.5 195.2 202.4	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 33.1 30.8 26.9 23.2 19.8 20.7 29.3 112.3 139.1 144.3 149.9 159.8	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39 32 27.5 23.3 19.9 20.7 29.3 114.9 139.6 144.2 149.9 159.8
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5 79.1	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.8 68.7 70.0 71.2 72.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 58.2 48.0 42.1 38.9 36.6 42.3 69.1 153.3 184.3 188.5 195.2 202.4 182.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2 80.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2 80.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39 32 27.5 23.3 19.9 20.7 29.3 114.9 139.6 144.2 149.9 159.8
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5 79.1 81.1	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.8 68.7 70.0 71.2 72.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 58.2 48.0 42.1 38.9 36.6 42.3 69.1 153.3 184.3 188.5 195.2 202.4 182.2 228.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2 80.9 93.0	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2 80.9 93.0	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39 32 27.5 23.3 19.9 20.7 29.3 114.9 139.6 144.2 149.9 159.8 144.4 190.6
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5 79.1 81.1 82.5 83.0	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.8 68.7 70.0 71.2 72.6 73.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 58.2 48.0 42.1 38.9 36.6 42.3 69.1 153.3 184.3 188.5 195.2 202.4 182.2 228.2 237.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2 80.9 93.0 104.4	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2 80.9 93.0 104.4	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39 32 27.5 23.3 19.9 20.7 29.3 114.9 139.6 144.2 149.9 159.8 144.4 190.6 200.1
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5 79.1 81.1 82.5 83.0	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7 70.0 71.2 72.6 73.6 73.7	Htg Btuh	Clg Ton 58.2 48.0 42.1 38.9 36.6 42.3 69.1 153.3 184.3 188.5 195.2 202.4 228.2 237.2 235.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2 80.9 93.0 104.4 95.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2 80.9 93.0 104.4 95.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39 32 27.5 23.3 19.9 20.7 29.3 114.9 139.6 144.2 149.9 159.8 144.4 190.6 200.1 192.6
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5 79.1 81.1 82.5 83.0 82.8	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7 70.0 71.2 72.6 73.6 73.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 58.2 48.0 42.1 38.9 36.6 42.3 69.1 153.3 184.3 188.5 195.2 202.4 182.2 228.2 237.2 235.5 198.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2 80.9 93.0 104.4 95.2 95.0	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2 80.9 93.0 104.4 95.2 95.0	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39 32 27.5 23.3 19.9 20.7 29.3 114.9 139.6 144.2 149.9 159.8 144.4 190.6 200.1 192.6 163.6
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5 79.1 81.1 82.5 83.0 82.8 82.3 81.5	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7 70.0 71.2 72.6 73.6 73.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 58.2 48.0 42.1 38.9 36.6 42.3 69.1 153.3 184.3 188.5 195.2 202.4 182.2 228.2 237.2 235.5 198.5 138.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2 80.9 93.0 104.4 95.2 95.0 84.0	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2 80.9 93.0 104.4 95.2 95.0 84.0	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39 32 27.3 23.3 19.9 20.7 29.3 114.9 139.6 144.2 149.9 159.8 144.4 190.6 200.1 192.6 163.6 111.6
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5 79.1 81.1 82.5 83.0 82.8 82.3 81.5	70.2 69.0 68.0 67.1 66.6 66.5 66.5 67.0 67.8 68.7 70.0 71.2 72.6 73.6 73.5 73.5 73.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 58.2 48.0 42.1 38.9 36.6 42.3 69.1 153.3 184.3 188.5 195.2 202.4 182.2 228.2 237.2 235.5 198.5 138.9 91.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2 80.9 93.0 104.4 95.2 95.0 84.0 75.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2 80.9 93.0 104.4 95.2 95.0 84.0 75.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39 32 27.3 23.3 19.9 20.7 29.3 114.9 139.6 144.2 149.9 159.8 144.4 190.6 200.1 192.6 163.6 111.6 72.4
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 69.1 71.2 73.8 76.5 79.1 81.1 82.5 83.0 82.8 81.5 80.4 79.1	70.2 69.0 68.0 67.1 66.6 66.5 66.5 67.0 67.8 68.7 70.0 71.2 72.6 73.6 73.5 73.5 73.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 58.2 48.0 42.1 38.9 36.6 42.3 69.1 153.3 184.3 188.5 195.2 202.4 182.2 228.2 237.2 235.5 198.5 138.9 91.6 84.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2 80.9 93.0 104.4 95.2 95.0 84.0 75.3 73.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2 80.9 93.0 104.4 95.2 95.0 84.0 75.3 73.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39 32 27.5 23.3 19.9 20.7 29.3 114.9 139.6 144.2 149.9 159.8 144.4 190.6 200.1 192.6 163.6 111.6 72.4 72.9
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.6 579.1 81.1 82.5 83.0 82.8 82.3 81.5 80.4 79.1 77.6	70.2 69.0 68.0 67.1 66.6 66.5 67.0 67.8 68.7 70.0 71.2 72.6 73.6 73.5 73.5 73.5 73.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 58.2 48.0 42.1 38.9 36.6 42.3 69.1 153.3 184.3 188.5 195.2 202.4 182.2 237.2 235.5 198.5 198.9 91.6 84.7 77.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2 80.9 93.0 104.4 95.2 95.0 84.0 75.3 73.3 69.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2 80.9 93.0 104.4 95.2 95.0 84.0 75.3 73.3 69.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39 32 27.5 23.3 19.9 20.7 29.3 114.9 139.6 144.2 149.9 159.8 144.4 190.6 200.1 192.6 163.6 111.6 72.4 72.9 69.2
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.6 579.1 81.1 82.5 83.0 82.8 82.3 81.5 80.4 79.1 77.6	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7 70.0 71.2 72.6 73.6 73.5 73.5 73.5 73.5 73.7 74.9 73.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 58.2 48.0 42.1 38.9 36.6 42.3 69.1 153.3 184.3 188.5 195.2 202.4 182.2 237.2 235.5 198.5 198.9 91.6 84.7 77.5 69.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39.0 32.8 27.3 23.3 19.9 20.7 29.3 34.7 41.1 49.7 55.1 66.2 80.9 93.0 104.4 95.2 95.0 84.0 75.3 73.3 69.3 63.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 39 32 27.5 23.3 19.9 20.7 29.3 114.9 139.6 144.2 149.9 159.8 144.4 190.6 200.1 192.6 163.6 111.6 72.4 72.9 69.2 63.7

Trane Air Conditioning Economics
By: Trane Customer Direct Service Network

Septer	nber		Desi	gn	Weekd	lay	Satu	rday	Sund	ay	Mond	ay
Hour	OADB	OAWB	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	
1	69.8	66.1	0	40.1	0	22.7	0	25.3	0	25.3	0	25.3
2	68.0	64.5	0	32.2	0	19.4	0	20.6	0	20.6	0	20.6
3	66.3	63.0	0	27.8	0	15.5	0	16.1	0	16.1	0	16.1
4	64.9	61.9	0	24.4	0	12.0	0	12.3	0	12.3	0	12.3
5	63.9	61.3	0	23.2	0	9.2	0	9.3	0	9.3	0	9.3
6	63.2	61.0	0	22.4	0	8.3	0	8.3	0	8.3	0	8.3
7	63.0	60.8	0	44.4	0	15.1	0	15.1	0	15.1	0	15.1
8	63.4	61.4	0	117.6	0	63.0	0	18.7	0	18.7	0	63.4
9	64.7	61.8	0	151.7	0	99.5	0	18.4	0	18.4	0	100.5
10	66.6	62.1	0	161.0	0	108.2	0	20.0	0	20.0	0	108.7
11	69.1	62.9	0	174.9	0	124.4	0	29.6	0	29.6	0	124.7
12	71.8	63.7	0	184.7	0	131.1	0	38.1	0	38.1	0	131.3
13	74.5	65.5	0	165.8	0	116.4	0	49.0	0	49.0	0	116.5
14	77.0	67.1	0	204.0	0	155.8	0	65.0	0	65.0	0	155.9
15	78.9	68.2	0	211.2	0	162.9	0	69.3	0	69.3	0	162.9
16	80.2	68.6	0	209.1	0	168.6	0	72.3	0	72.3	0	168.6
17	80.6	68.5	0	168.6	0	137.6	0	70.1	0	70.1	0	137.6
18	80.4	68.9	0	110.8	0	87.0	0	58.7	0	58.7	0	87.0
19	79.7	70.0	0	76.7	0	57.1	0	58.1	0	58.1	0	57.1
20	78.7	71.2	0	68.1	0	55.7	0	56.1	0	56.1	0	55.7
21	77.3	71.6	0	59.7	0	52.9	0	53.0	0	53.0	0	52.9
22	75.6	70.5	0	51.3	0	47.3	0	47.4	0	47.4	C	47.3
23	73.7	69.4	0	44.4	0	40.4	0	40.4	0	40.4	0	40.4
24	71.8	67.7	0	38.4	0	32.4	0	32.4	0	32.4	0	32.4
Octobe	ər		Desi	gn	Weekd	ay	Satu		Sund	-		_
Octobe Hour	OADB		Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton
Hour 1	OADB 54.8	51.3	Htg Btuh O	Clg Ton 3.2	Htg Btuh O	Clg Ton 6.7	Htg Btuh 0	Clg Ton 6.6	Htg Btuh O	Clg Ton 6.6	Htg Btuh O	Clg Ton 6.6
Hour 1 2	OADB 54.8 52.9	51.3 49.6	Htg Btuh 0 0	Clg Ton 3.2 1.7	Htg Btuh O O	Clg Ton 6.7 5.4	Htg Btuh 0 0	Clg Ton 6.6 5.3	Htg Btuh O O	Clg Ton 6.6 5.3	Htg Btuh O O	Clg Ton 6.6 5.3
Hour 1	OADB 54.8 52.9	51.3	Htg Btuh 0 0 0	Clg Ton 3.2	Htg Btuh 0 0 0	Clg Ton 6.7	Htg Btuh 0 0 0	Clg Ton 6.6 5.3 4.4	Htg Btuh 0 0 0	Clg Ton 6.6 5.3 4.4	Htg Btuh O O O	Clg Ton 6.6 5.3 4.4
Hour 1 2 3 4	OADB 54.8 52.9 51.2 49.8	51.3 49.6 48.2 47.2	Htg Btuh O O O	Clg Ton 3.2 1.7 0.9	Htg Btuh O O O	Clg Ton 6.7 5.4 4.4 3.6	Htg Btuh 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5	Htg Btuh O O O	Clg Ton 6.6 5.3 4.4 3.5	Htg Btuh 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5
Hour 1 2 3 4 5	OADB 54.8 52.9 51.2 49.8 48.8	51.3 49.6 48.2 47.2 46.2	Htg Btuh 0 0 0 0 0	Clg Ton 3.2 1.7 0.9 0.0	Htg Btuh 0 0 0 0 0	Clg Ton 6.7 5.4 4.4 3.6 2.0	Htg Btuh 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9	Htg Btuh 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9	Htg Btuh 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9
Hour 1 2 3 4 5	OADB 54.8 52.9 51.2 49.8 48.8 48.2	51.3 49.6 48.2 47.2 46.2 45.7	Htg Btuh 0 0 0 0 0 0	Clg Ton 3.2 1.7 0.9 0.0 0.0	Htg Btuh 0 0 0 0 0 0	Clg Ton 6.7 5.4 4.4 3.6 2.0	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9	Htg Btuh 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9	Htg Btuh 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9
Hour 1 2 3 4 5 6 7	OADB 54.8 52.9 51.2 49.8 48.8 48.2	51.3 49.6 48.2 47.2 46.2 45.7 45.6	Htg Btuh 0 0 0 0 0 0	Clg Ton 3.2 1.7 0.9 0.0 0.0 0.0 5.1	Htg Btuh 0 0 0 0 0 0	Clg Ton 6.7 5.4 4.4 3.6 2.0 1.5 5.5	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5	Htg Btuh 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4	Htg Btuh 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5
Hour 1 2 3 4 5 6 7 8	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0	Clg Ton 3.2 1.7 0.9 0.0 0.0 5.1 24.0	Htg Htuh 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.7 5.4 4.4 3.6 2.0 1.5 5.5 14.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4
Hour 1 2 3 4 5 6 7 8 9	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 3.2 1.7 0.9 0.0 0.0 5.1 24.0 54.2	Htg Htuh 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.7 5.4 4.4 3.6 2.0 1.5 5.5 14.9 27.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 14.8 24.4
Hour 1 2 3 4 5 6 7 8 9 10	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 3.2 1.7 0.9 0.0 0.0 0.0 5.1 24.0 54.2 75.8	Htg Htuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.7 5.4 4.4 3.6 2.0 1.5 5.5 14.9 27.3 32.8	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 14.8 24.4 32.9
Hour 1 2 3 4 5 6 7 8 9 10 11	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9 56.2	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 3.2 1.7 0.9 0.0 0.0 5.1 24.0 54.2 75.8 108.7	Htg Htuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.7 5.4 4.4 3.6 2.0 1.5 5.5 14.9 27.3 32.8 46.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 14.8 24.4 32.9 35.9
Hour 1 2 3 4 5 6 7 8 9 10 11 12	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9 56.2 59.6	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9 51.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 3.2 1.7 0.9 0.0 0.0 5.1 24.0 54.2 75.8 108.7 126.6	Htg Htuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.7 5.4 4.4 3.6 2.0 1.5 5.5 14.9 27.3 32.8 46.2 74.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 14.8 24.4 32.9 35.9 49.0
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9 56.2 59.6 62.9	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9 51.5 53.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 3.2 1.7 0.9 0.0 0.0 5.1 24.0 54.2 75.8 108.7 126.6 114.5	Htg Htuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.7 5.4 4.4 3.6 2.0 1.5 5.5 14.9 27.3 32.8 46.2 74.5 72.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.8	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 14.8 24.4 32.9 35.9 49.0 45.5
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9 56.2 59.6 62.9 65.5	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9 51.5 53.5 55.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 3.2 1.7 0.9 0.0 0.0 5.1 24.0 54.2 75.8 108.7 126.6 114.5 143.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.7 5.4 4.4 3.6 2.0 1.5 5.5 14.9 27.3 32.8 46.2 74.5 72.1 102.0	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.8 17.4	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.7 17.4	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 14.8 24.4 32.9 35.9 49.0 45.5 78.1
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14	OADB 54.8 52.9 51.2 49.8 48.8 47.9 48.5 50.3 52.9 56.2 59.6 62.9 65.5 67.3	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9 51.5 53.5 55.2 56.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 3.2 1.7 0.9 0.0 0.0 5.1 24.0 54.2 75.8 108.7 126.6 114.5 143.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.7 5.4 4.4 3.6 2.0 1.5 5.5 14.9 27.3 32.8 46.2 74.5 72.1 102.0 109.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.8 17.4 18.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.7 16.7 17.4	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 14.8 24.4 32.9 35.9 49.0 45.5 78.1 98.9
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9 56.2 59.6 62.9 65.5 67.3 67.9	51.3 49.6 48.2 47.2 46.2 45.6 46.2 47.3 48.7 49.9 51.5 53.5 55.2 56.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 3.2 1.7 0.9 0.0 0.0 5.1 24.0 54.2 75.8 108.7 126.6 114.5 143.5 150.4 148.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.7 5.4 4.4 3.6 2.0 1.5 5.5 14.9 27.3 32.8 46.2 74.5 72.1 102.0 109.5 111.4	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.8 17.4 18.5 18.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.7 17.4 18.5 18.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 14.8 24.4 32.9 35.9 49.0 45.5 78.1 98.9
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9 56.2 59.6 62.9 65.5 67.3 67.9	51.3 49.6 48.2 47.2 46.2 45.6 46.2 47.3 48.7 49.9 51.5 53.5 55.2 56.3 56.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 3.2 1.7 0.9 0.0 0.0 0.0 5.1 24.0 54.2 75.8 108.7 126.6 114.5 143.5 143.5 150.4 148.6 109.8	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.7 5.4 4.4 3.6 2.0 1.5 5.5 14.9 27.3 32.8 46.2 74.5 72.1 102.0 109.5 111.4 82.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.8 17.4 18.5 18.7 14.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.7 17.4 18.5 18.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 14.8 24.4 32.9 35.9 49.0 45.5 78.1 98.9 111.4 82.5
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	OADB 54.8 52.9 51.2 49.8 48.8 48.5 50.3 52.9 56.2 59.6 62.9 65.5 67.3 67.7 67.7	51.3 49.6 48.2 47.2 46.2 45.6 46.2 47.3 48.7 49.9 51.5 53.5 55.6 56.6 56.4 56.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 3.2 1.7 0.9 0.0 0.0 0.0 5.1 24.0 54.2 75.8 108.7 126.6 114.5 143.5 150.4 148.6 109.8 66.8	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.7 5.4 4.4 3.6 2.0 1.5 5.5 14.9 27.3 32.8 46.2 74.5 72.1 102.0 109.5 111.4 82.5 45.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.8 17.4 18.5 18.7 14.5 12.8	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 17.4 18.5 18.7 14.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 14.8 24.4 32.9 35.9 49.0 45.5 78.1 98.9 111.4 82.5 45.7
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 56.2 59.6 62.9 65.5 67.3 67.9 67.7 67.0 66.0	51.3 49.6 48.2 47.2 46.2 45.6 46.2 47.3 48.7 49.9 51.5 53.5 55.2 56.6 56.4 56.6 57.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 3.2 1.7 0.9 0.0 0.0 0.0 5.1 24.0 54.2 75.8 108.7 126.6 114.5 143.5 150.4 148.6 109.8 66.8 32.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.7 5.4 4.4 3.6 2.0 1.5 5.5 14.9 27.3 32.8 46.2 74.5 72.1 102.0 109.5 111.4 82.5 45.7 18.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.8 17.4 18.5 18.7 14.5 12.8 12.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.7 17.4 18.5 18.7 14.5 12.8 12.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 14.8 24.4 32.9 35.9 49.0 45.5 78.1 98.9 111.4 82.5 45.7 18.9
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	OADB 54.8 52.9 51.2 49.8 48.8 48.5 50.3 52.9 56.2 67.3 67.9 67.7 66.0 64.6	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9 51.5 53.5 55.2 56.3 56.4 56.6 57.6 57.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 3.2 1.7 0.9 0.0 0.0 0.0 5.1 24.0 54.2 75.8 108.7 126.6 114.5 143.5 150.4 148.6 109.8 66.8 32.1 24.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.7 5.4 4.4 3.6 2.0 1.5 5.5 14.9 27.3 32.8 46.2 74.5 72.1 102.0 109.5 111.4 82.5 45.7 18.9 16.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.8 17.4 18.5 18.7 14.5 12.8 12.7 12.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C1g Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.7 17.4 18.5 18.7 14.5 12.8 12.7 12.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 14.8 24.4 32.9 35.9 45.5 78.1 98.9 111.4 82.5 45.7 16.1
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	OADB 54.8 52.9 51.2 49.8 48.8 47.9 48.5 50.3 52.9 56.2 59.6 67.3 67.9 67.7 67.0 66.0 64.6 62.9	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9 51.5 53.5 55.2 56.3 56.6 57.6 57.6 57.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 3.2 1.7 0.9 0.0 0.0 0.0 5.1 24.0 54.2 75.8 108.7 126.6 114.5 143.5 150.4 148.6 109.8 66.8 32.1 24.1 18.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.7 5.4 4.4 3.6 2.0 1.5 5.5 14.9 27.3 32.8 46.2 74.5 72.1 102.0 109.5 111.4 82.5 45.7 18.9 16.1 12.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.8 17.4 18.5 18.7 14.5 12.8 12.7 12.1 11.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.7 17.4 18.5 18.7 14.5 12.8 12.7 12.1 11.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 14.8 24.4 32.9 35.9 49.0 45.5 78.1 98.9 111.4 82.5 45.7 18.9
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	OADB 54.8 52.9 51.2 49.8 48.8 48.5 50.3 52.9 56.2 59.6 62.9 65.5 67.3 67.9 67.7 67.0 66.0 62.9 61.0	51.3 49.6 48.2 47.2 45.6 45.6 46.2 47.3 48.7 49.9 51.5 55.2 56.3 56.6 57.9 57.3 56.0	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 3.2 1.7 0.9 0.0 0.0 5.1 24.0 54.2 75.8 108.7 126.6 114.5 143.5 150.4 148.6 109.8 66.8 32.1 24.1 18.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.7 5.4 4.4 3.6 2.0 1.5 5.5 14.9 27.3 32.8 46.2 74.5 72.1 102.0 109.5 111.4 82.5 45.7 18.9 16.1 12.9 9.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.8 17.4 18.5 18.7 14.5 12.8 12.7 12.1 11.2 9.4	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.7 17.4 18.5 18.7 14.5 12.8 12.7 12.1 11.2 9.4	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 14.8 24.4 32.9 35.9 49.0 45.5 78.1 98.9 111.4 82.5 45.7 18.9 16.1 12.9 9.6
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	OADB 54.8 52.9 51.2 49.8 48.8 47.9 48.5 50.3 52.9 56.2 59.6 62.9 67.7 67.0 66.0 64.6 62.9 61.0 59.0	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9 51.5 53.5 55.2 56.3 56.6 57.6 57.6 57.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 3.2 1.7 0.9 0.0 0.0 0.0 5.1 24.0 54.2 75.8 108.7 126.6 114.5 143.5 150.4 148.6 109.8 66.8 32.1 24.1 18.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.7 5.4 4.4 3.6 2.0 1.5 5.5 14.9 27.3 32.8 46.2 74.5 72.1 102.0 109.5 111.4 82.5 45.7 18.9 16.1 12.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.8 17.4 18.5 18.7 14.5 12.8 12.7 12.1 11.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 7.2 6.9 8.5 10.9 15.7 16.7 17.4 18.5 18.7 14.5 12.8 12.7 12.1 11.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 6.6 5.3 4.4 3.5 1.9 1.5 5.4 14.8 24.4 32.9 35.9 49.0 45.5 78.1 98.9 111.4 82.5 45.7 18.9

V 600 PAG

Novem	ber		Desi	gn	Weekd	ay	Satu	ırday	Sund	lay	Mond	ay
Hour	OADB	OAWB	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	
1	48.7	45.7	0	0.0	. 0	0.0	Ō	0.0	-116,754	0.0	-128,687	0.0
2	46.9	44.1	0	0.0	0	0.0	0	0.0	-129,770	0.0	-190,279	0.0
3		42.8	-40,246	0.0	0	0.0	0	0.0	-128,072	0.0	-219,816	0.0
4		41.9	-176,274	0.0	0	0.0	ō	0.0	-149,085	0.0	-311,308	0.0
5		42.0	-182,598	0.0	ō	0.0	ō	0.0	-208,666	0.0	-325,406	0.0
6		42.7	-181,046	0.0	ō	0.0	0	0.0	-251,400	0.0	-347,205	0.0
7		43.9	-167,527	0.0	Ö	0.0	-19,779	0.0	-231,691	0.0	-329,877	0.0
8		46.0	0	0.0	0	0.0	-32,468	0.0	-152,132	0.0	-329,877	0.0
9		48.0	Ö	0.0	0	0.0	•	0.0	-123,708	0.0	0	0.0
10		49.9	0	0.0	0	0.0	-26,416		-82,242		_	
						0.0	-16,942	0.0	-36,830	0.0	0	0.0
11		51.1	0	0.0	0		-8,359	0.0	•	0.0	0	0.0
12		52.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
13		52.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
14		53.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15		53.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
16		53.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
17		53.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
18		53.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
19		54.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
20	60.0	53.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
21		52.7	0	0.0	0	0.0	-4,433	0.0	-4,433	0.0	0	0.0
22	55.6	51.2	0	0.0	0	0.0	-21,093	0.0	-48,811	0.0	0	0.0
23		49.5	0	0.0	0	0.0	-63,794	0.0	-77,035	0.0	0	0.0
24	50.8	47.6	0	0.0	0	0.0	-90,885	0.0	-90,877	0.0	0	0.0
Decemb	ber		Desi	gn	Weekd	ay	Satu	rday	Sund	ay		-
Hour		CAUTO										
	OADB	OMMD	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Cig Ton
1	37.5	35.3	Htg Btuh O	Clg Ton 0.0	Htg Btuh -15,606	Clg Ton 0.0	Htg Btuh -22,508	Clg Ton 0.0	-450,085	0.0	-486,611	Clg Ton
	37.5		•	-	•	-	-	-	-	-	-486,611 -511,037	Cig Ton
1	37.5 37.1	35.3	0	0.0	-15,606	0.0	-22,508	0.0	-450,085	0.0	-486,611 -511,037 -526,921	0.0
1 2	37.5 37.1 37.4	35.3 35.1	0	0.0	-15,606 -76,828	0.0	-22,508 -76,824	0.0	-450,085 -472,380	0.0	-486,611 -511,037 -526,921 -521,952	0.0
1 2 3	37.5 37.1 37.4 38.1	35.3 35.1 35.5	0 0 0	0.0 0.0 0.0	-15,606 -76,828 -185,970	0.0 0.0 0.0	-22,508 -76,824 -143,257	0.0 0.0 0.0	-450,085 -472,380 -486,845	0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536	0.0
1 2 3 4	37.5 37.1 37.4 38.1 39.3	35.3 35.1 35.5 36.2	0 0 0 -25,720	0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214	0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241	0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902	0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952	0.0
1 2 3 4 5	37.5 37.1 37.4 38.1 39.3 40.9	35.3 35.1 35.5 36.2 37.6	0 0 0 -25,720 -91,762	0.0 0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214 -220,698	0.0 0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241 -269,550	0.0 0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902 -513,555	0.0 0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536	0.0
1 2 3 4 5 6	37.5 37.1 37.4 38.1 39.3 40.9	35.3 35.1 35.5 36.2 37.6 39.2	0 0 0 -25,720 -91,762 -257,932	0.0 0.0 0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214 -220,698 -214,318	0.0 0.0 0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241 -269,550 -325,111	0.0 0.0 0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902 -513,555 -499,859	0.0 0.0 0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536 -499,885	0.0
1 2 3 4 5 6 7	37.5 37.1 37.4 38.1 39.3 40.9 42.7 44.7	35.3 35.1 35.5 36.2 37.6 39.2 41.2	0 0 0 -25,720 -91,762 -257,932 -266,568	0.0 0.0 0.0 0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214 -220,698 -214,318 -212,665	0.0 0.0 0.0 0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241 -269,550 -325,111 -317,308	0.0 0.0 0.0 0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902 -513,555 -499,859 -488,600	0.0 0.0 0.0 0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536 -499,885 -488,599	0.0 0.0 0.0 0.0
1 2 3 4 5 6 7 8	37.5 37.1 37.4 38.1 39.3 40.9 42.7 44.7	35.3 35.1 35.5 36.2 37.6 39.2 41.2 43.1	0 0 0 -25,720 -91,762 -257,932 -266,568 -1,260	0.0 0.0 0.0 0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214 -220,698 -214,318 -212,665	0.0 0.0 0.0 0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241 -269,550 -325,111 -317,308 -294,067	0.0 0.0 0.0 0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902 -513,555 -499,859 -488,600 -406,180	0.0 0.0 0.0 0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536 -499,885 -488,599	0.0 0.0 0.0 0.0 0.0
1 2 3 4 5 6 7 8	37.5 37.1 37.4 38.1 39.3 40.9 42.7 44.7 46.8 48.8	35.3 35.1 35.5 36.2 37.6 39.2 41.2 43.1 45.3	0 0 0 -25,720 -91,762 -257,932 -266,568 -1,260	0.0 0.0 0.0 0.0 0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214 -220,699 -214,318 -212,665 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241 -269,550 -325,111 -317,308 -294,067 -318,485	0.0 0.0 0.0 0.0 0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902 -513,555 -499,859 -488,600 -406,180 -346,638	0.0 0.0 0.0 0.0 0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536 -499,885 -488,599 0	0.9 0.0 0.0 0.0 0.0
1 2 3 4 5 6 7 8 9	37.5 37.1 37.4 38.1 39.3 40.9 42.7 44.7 46.8 48.8 50.7	35.3 35.1 35.5 36.2 37.6 39.2 41.2 43.1 45.3 47.0	0 0 0 -25,720 -91,762 -257,932 -266,568 -1,260 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214 -220,698 -214,318 -212,665 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241 -269,550 -325,111 -317,308 -294,067 -318,485 -254,684	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902 -513,555 -499,859 -488,600 -406,180 -346,638 -277,788	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536 -499,885 -488,599 0	0.0 0.0 0.0 0.0 0.0 0.0
1 2 3 4 5 6 7 8 9 10	37.5 37.1 37.4 38.1 39.3 40.9 42.7 44.7 46.8 48.8 50.7	35.3 35.1 35.5 36.2 37.6 39.2 41.2 43.1 45.3 47.0 48.1 48.8	0 0 0 -25,720 -91,762 -257,932 -266,568 -1,260 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214 -220,698 -214,318 -212,665 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241 -269,550 -325,111 -317,308 -294,067 -318,485 -254,684 -190,578	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902 -513,555 -499,859 -488,600 -406,180 -346,638 -277,788 -207,926	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536 -499,885 -488,599 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0
1 2 3 4 5 6 7 8 9 10 11	37.5 37.1 37.4 38.1 39.3 40.9 42.7 44.7 46.8 48.8 50.7 52.2	35.3 35.1 35.5 36.2 37.6 39.2 41.2 43.1 45.3 47.0 48.1 48.8 49.2	0 0 0 -25,720 -91,762 -257,932 -266,568 -1,260 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214 -220,698 -214,318 -212,665 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241 -269,550 -325,111 -317,308 -294,067 -318,485 -254,684 -190,578 -130,645	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902 -513,555 -499,859 -488,600 -406,180 -346,638 -277,788 -207,926 -142,689	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536 -499,885 -488,599 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0
1 2 3 4 5 6 7 8 9 10 11 12 13	37.5 37.1 37.4 38.1 39.3 40.9 42.7 44.7 46.8 48.8 50.7 52.2 53.4	35.3 35.1 35.5 36.2 37.6 39.2 41.2 43.1 45.3 47.0 48.1 48.8 49.2 49.2	0 0 0 -25,720 -91,762 -257,932 -266,568 -1,260 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214 -220,698 -214,318 -212,665 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241 -269,550 -325,111 -317,308 -294,067 -318,485 -254,684 -190,578 -130,645 -84,547	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902 -513,555 -499,859 -488,600 -406,180 -346,638 -277,788 -207,926 -142,689 -91,749	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536 -499,885 -488,599 0 0 0	0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1 2 3 4 5 6 7 8 9 10 11 12 13	37.5 37.1 37.4 38.1 39.3 40.9 42.7 44.7 46.8 50.7 52.2 53.4 54.1	35.3 35.1 35.5 36.2 37.6 39.2 41.2 43.1 45.3 47.0 48.1 48.8 49.2 49.2	0 0 0 -25,720 -91,762 -257,932 -266,568 -1,260 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214 -220,698 -214,318 -212,665 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241 -269,550 -325,111 -317,308 -294,067 -318,485 -254,684 -190,578 -130,645 -84,547 -47,349	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902 -513,555 -499,859 -488,600 -406,180 -346,638 -277,788 -207,926 -142,689 -91,749 -50,408	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536 -499,885 -488,599 0 0 0	0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14	37.5 37.1 37.4 38.1 39.3 40.9 42.7 44.7 46.8 50.7 52.2 53.4 54.1	35.3 35.1 35.5 36.2 37.6 39.2 41.2 43.1 45.3 47.0 48.1 48.8 49.2 48.9	0 0 0 -25,720 -91,762 -257,932 -266,568 -1,260 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214 -220,698 -214,318 -212,665 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241 -269,550 -325,111 -317,308 -294,067 -318,485 -254,684 -190,578 -130,645 -84,547 -47,349 -31,685	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902 -513,555 -499,859 -488,600 -406,180 -346,638 -277,788 -207,926 -142,689 -91,749 -50,408 -31,685	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536 -499,885 -488,599 0 0 0	0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	37.5 37.1 37.4 38.1 39.3 40.9 42.7 46.8 48.8 50.7 52.2 53.4 54.1 54.4	35.3 35.1 35.5 36.2 37.6 39.2 41.2 43.1 45.3 47.0 48.1 48.8 49.2 49.2 48.9	0 0 0 -25,720 -91,762 -257,932 -266,568 -1,260 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214 -220,698 -214,318 -212,665 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241 -269,550 -325,111 -317,308 -294,067 -318,485 -254,684 -190,578 -130,645 -84,547 -47,349 -31,685 -37,970	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902 -513,555 -499,859 -488,600 -406,180 -346,638 -277,788 -207,926 -142,689 -91,749 -50,408 -31,685 -37,970	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536 -499,885 -488,599 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	37.5 37.1 37.4 38.1 39.3 40.9 42.7 46.8 48.8 50.7 52.2 53.4 54.1 54.4 54.0 53.0	35.3 35.1 35.5 36.2 37.6 39.2 41.2 43.1 45.3 47.0 48.1 48.8 49.2 48.2 48.2 48.2	0 0 0 -25,720 -91,762 -257,932 -266,568 -1,260 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214 -220,698 -214,318 -212,665 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241 -269,550 -325,111 -317,308 -294,067 -318,485 -254,684 -190,578 -130,645 -84,547 -47,349 -31,685 -37,970 -107,060	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902 -513,555 -499,859 -488,600 -346,638 -277,788 -207,926 -142,689 -91,749 -50,408 -31,685 -37,970 -108,055	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536 -499,885 -488,599 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	37.5 37.1 37.4 38.1 39.3 40.9 42.7 46.8 48.8 50.7 52.2 53.4 54.1 54.4 54.0 53.0 51.4	35.3 35.1 35.5 36.2 37.6 39.2 41.2 43.1 45.3 47.0 48.1 48.8 49.2 48.2 49.2 48.2 46.3 46.3	0 0 0 -25,720 -91,762 -257,932 -266,568 -1,260 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214 -220,698 -214,318 -212,665 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241 -269,550 -325,111 -317,308 -294,067 -318,485 -254,684 -190,578 -130,645 -84,547 -47,349 -31,685 -37,970 -107,060 -126,889	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902 -513,555 -499,859 -488,600 -406,180 -346,638 -277,788 -207,926 -142,689 -91,749 -50,408 -31,685 -37,970 -108,055 -130,647	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536 -499,885 -488,599 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	37.5 37.1 37.4 38.1 39.3 40.9 42.7 44.7 46.8 48.8 50.7 52.2 53.4 54.1 54.4 54.0 53.0 51.4 49.3 47.0	35.3 35.1 35.5 36.2 37.6 39.2 41.1 48.1 47.0 48.1 48.8 49.2 48.9 48.2 47.3 46.3 45.4	0 0 0 -25,720 -91,762 -257,932 -266,568 -1,260 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214 -220,698 -214,318 -212,665 0 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241 -269,550 -325,111 -317,308 -294,067 -318,485 -254,684 -190,578 -130,645 -84,547 -47,349 -31,685 -37,970 -107,060 -126,889 -162,447	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902 -513,555 -499,859 -488,600 -406,180 -346,638 -277,788 -207,926 -142,689 -91,749 -50,408 -31,685 -37,970 -108,055 -130,647 -171,222	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536 -499,885 -488,599 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	37.5 37.1 37.4 38.1 39.3 40.9 42.7 44.7 46.8 48.8 50.7 52.2 53.4 54.1 54.4 54.0 53.0 51.4 49.3 47.0	35.3 35.1 35.5 36.2 37.6 39.2 43.1 47.0 48.1 48.8 49.2 48.9 48.9 46.3 46.3 45.4 43.5 41.5	0 0 0 -25,720 -91,762 -257,932 -266,568 -1,260 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214 -220,698 -214,318 -212,665 0 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241 -269,550 -325,111 -317,308 -294,067 -318,485 -254,684 -190,578 -130,645 -84,547 -47,349 -31,685 -37,970 -107,060 -126,889 -162,447 -210,331	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902 -513,555 -499,859 -488,600 -406,180 -346,638 -277,788 -207,926 -142,689 -91,749 -50,408 -31,685 -37,970 -108,055 -130,647 -171,222 -224,364	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536 -499,885 -488,599 0 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	37.5 37.1 37.4 38.1 39.3 40.9 42.7 46.8 48.8 50.7 52.2 53.4 54.1 54.4 54.0 53.0 51.4 49.3 47.0 44.5 42.2	35.3 35.1 35.5 36.2 37.6 39.2 43.1 47.0 48.1 48.8 49.2 48.9 48.9 46.3 46.3 45.4 43.5 41.5	0 0 0 -25,720 -91,762 -257,932 -266,568 -1,260 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214 -220,698 -214,318 -212,665 0 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241 -269,550 -325,111 -317,308 -294,067 -318,485 -254,684 -190,578 -130,645 -84,547 -47,149 -31,685 -37,970 -107,060 -126,889 -162,447 -210,331 -275,119	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902 -513,555 -499,859 -488,600 -406,180 -346,638 -277,788 -207,926 -142,689 -91,749 -50,408 -31,685 -37,970 -108,055 -130,647 -171,222 -224,364 -294,789	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536 -499,885 -488,599 0 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	37.5 37.1 37.4 38.1 39.3 40.9 42.7 44.7 46.8 48.8 50.7 52.2 53.4 54.4 54.0 53.0 51.4 49.3 47.0 44.5 42.2	35.3 35.1 35.5 36.2 37.6 39.2 41.2 43.1 47.0 48.1 48.8 49.2 48.9 48.9 48.3 46.3 46.3 45.4 43.5 41.5 39.3	0 0 0 -25,720 -91,762 -257,932 -266,568 -1,260 0 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214 -220,698 -214,318 -212,665 0 0 0 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241 -269,550 -325,111 -317,308 -294,067 -318,485 -254,684 -190,578 -130,645 -84,547 -47,349 -31,685 -37,970 -107,060 -126,889 -162,447 -210,331 -275,119 -326,247	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902 -513,555 -499,859 -488,600 -406,180 -346,638 -277,788 -207,926 -142,689 -91,749 -50,408 -31,685 -37,970 -108,055 -130,647 -171,222 -224,364 -294,789 -351,176	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536 -499,885 -488,599 0 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	37.5 37.1 37.4 38.1 39.3 40.9 42.7 44.7 46.8 48.8 50.7 52.2 53.4 54.4 54.0 53.0 51.4 49.3 47.0 44.5 42.2	35.3 35.1 35.5 36.2 37.6 39.2 43.1 45.3 47.0 48.1 48.8 49.2 48.9 48.2 47.3 46.3 45.3 45.3 45.3	0 0 0 -25,720 -91,762 -257,932 -266,568 -1,260 0 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-15,606 -76,828 -185,970 -226,214 -220,698 -214,318 -212,665 0 0 0 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-22,508 -76,824 -143,257 -226,241 -269,550 -325,111 -317,308 -294,067 -318,485 -254,684 -190,578 -130,645 -84,547 -47,349 -31,685 -37,970 -107,060 -126,889 -162,447 -210,331 -275,119 -326,247 -369,415	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-450,085 -472,380 -486,845 -481,902 -513,555 -499,859 -488,600 -406,180 -346,638 -277,788 -207,926 -142,689 -91,749 -50,408 -31,685 -37,970 -108,055 -130,647 -171,222 -224,364 -294,789 -351,176 -399,359	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-486,611 -511,037 -526,921 -521,952 -513,536 -499,885 -488,599 0 0 0 0 0 0 0 0	0.00.00.00.00.00.00.00.00.00.00.00.00.0

MONTHLY ENERGY CONSUMPTION - ALTERNATIVE 1

BLDG G101, BASELINE

------ MONTHLY ENERGY CONSUMPTION -----

Month	ELEC On Peak (kWh)	DEMAND On Peak (kW)	GAS On Peak (Therm)	WATER (1000 Gl)	GAS DMND On Peak (Thrm/hr)
Jan	144,655	361	1,742	1	9
Feb	131,981	361	1,668	1	8
March	142,834	361	409	0	5
April	128,736	361	6	0	1
May	196,187	607	0	0	0
June	222,154	680	0	0	0
July	218,601	667	0	0	0
Aug	226,866	670	0	0	0
Sept	194,978	633	0	0	0
Oct	172,681	540	0	0	0
Nov	131,660	361	253	0	4
Dec	139,831	361	1,160	1	6
Total	2,051,163	680	5,238	3	9

Building Energy Consumption = 62,609 (Btu/Sq Ft/Year)
Source Energy Consumption = 179,357 (Btu/Sq Ft/Year)

Floor Area = 120,182 (Sq Ft)

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EQUIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1 BLDG G101, BASELINE

------ EQUIPMENT ENERGY CONSUMPTION -----

f	Equip	_			_		thly Con	-						
m	Code	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Tota
0	LIGHTS													
	ELEC	61547	55625	63698	59214	62622	61366	60471	63698	59214	62622	59214	60471	729,76
	PK	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.
1	MISC LD													
	ELEC	36778	33261	39395	35169	38086	37787	35469	39395	35169	38086	35169	35469	439,23
	PK	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.
2	MISC LD													
	GAS	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
3	MISC LD													
	OIL	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Ļ	MISC LD	_	_	_	_	_	_	_	_	_	_		•	
	P STEAM	0	0	0	0	0	0	0	0	0	0	0	0	_
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	MISC LD		_	_	_	_	_	_	_	_	_		_	
	P HOTH20	0	0	0	0	0	0	0	0	0	0	0	0	_
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	o
•	MISC LD			_	_		_			_	_		•	
	P CHILL	0	0	0	0	0	0	0	0	0	0	0	0	_
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	EQ1121S			-CLD RECI								_		
	ELEC	0	0	0	0	5198	9148	8958	9095	6178	1915	0	0	40,4
	PK	0.0	0.0	0.0	0.0	33.2	40.3	38.8	38.9	32.7	19.1	0.0	0.0	40
	EQ5200			DENSER FA								_	_	
	ELEC	0	0	0	0	626	1158	1141	1149	760	183	0	0	5,0
	PK	0.0	0.0	0.0	0.0	3.7	4.5	4.4	4.4	3.9	2.7	0.0	0.0	4
	EQ5001	_		LLED WATE								-		25.5
	ELEC	0	0	0	0	4008	5256	5431	5431	4599	1569	0	0	26,2
	PK	0.0	0.0	0.0	0.0	7.3	7.3	7.3	7.3	7.3	7.3	0.0	0.0	7
	EQ5313			TROLS								-	_	
	ELEC	0	0	0	0	165	216	223	223	189	65	0	0	1,0
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	C
	EQ1120S			-CLD RECI								_	_	
	ELEC	0	0	0	0	3232	5135	5072	5238	3685	1702	0	0	24,0
	PK	0.0	0.0	0.0	0.0	18.8	22.4	22.0	22.1	19.0	12.0	0.0	0.0	22

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2	EQ5200			DENSER F								_		
	ELEC	0	0	0	0	387	646	642	657	452	159	0	0	2,943
	PK	0.0	0.0	0.0	0.0	2.1	2.5	2.5	2.5	2.2	1.7	0.0	0.0	2.5
2	EQ5001		CHI	LLED WAT	ER PUMP (c.v.								
	ELEC	0	0	0	0	1569	1656	1711	1711	1656	658	0	O	8,961
	PK	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3	0.0	0.0	2.3
2	EQ5313		COM	TROLS										
-	ELEC	0	0	0	0	205	216	223	223	216	86	0	0	1,169
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
3		_		-CLD CON		5-60 TON								
	ELEC	0	0	0	0	6061	10762	10633	10667	7086	1861	0	0	47,069
	PK	0.0	0.0	0.0	0.0	35.4	43.0	41.6	41.6	37.0	24.4	0.0	0.0	43.0
3	EQ5200		CON	DENSER F	ANS									
	ELEC	0	0	0	0	731	1346	1348	1336	875	180	0	0	5,815
	PK	0.0	0.0	0.0	0.0	4.2	5.1	5.0	5.0	4.5	3.2	0.0	0.0	5.1
3	EQ5313		CON	TROLS										
-	ELEC	0	0	0	0	163	216	223	223	180	61	0	0	1,067
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
4	EQ1122L				IP >55 TO									
	ELEC	0	0	0	0	19622	33508	31812	32514	22418	11914	0	0	151,788
	PK	0.0	0.0	0.0	0.0	116.1	151.2	142.8	145.3	125.6	74.1	0.0	0.0	151.2
4	EQ5200		CON	DENSER F	ANS									
	ELEC	0	0	0	0	2204	4087	3936	3996	2647	976	0	0	17,845
	PK	0.0	0.0	0.0	0.0	14.1	18.1	17.1	17.3	15.3	10.2	0.0	0.0	18.1
4	EQ5001		СНТ	T.T.ED WAT	ER PUMP (. v								
_	ELEC	О	0	0	0	15698	15192	15698	15698	15192	15044	0	0	92,524
	PK	0.0	0.0	0.0	0.0	21.1	21.1	21.1	21.1	21.1	21.1	0.0	0.0	21.1
4	EQ5313	•		TROLS		202	21.0	202	202	216	21.4	•	•	
	ELEC PK	0.0	0.0	0.0	0.0	223 0.3	216 0.3	223 0.3	223 0.3	216 0.3	214 0.3	0.0	0 0.0	1,315 0.3
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.5
1	EQ4003		FC	CENTRIF.	FAN C.V.									
	ELEC	16899	15264	16899	16354	16899	16354	16899	16899	16354	16899	16354	16899	198,974
	PK	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
າ	EQ4003		EC.	CENTRIE	FAN C.V.									
-	ELEC	1797	1623	1797	1739	1797	1739	1797	1797	1739	1797	1739	1797	21,156
	PK	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
									· •		-			_••
3	EQ4371				PPLY FAN									** ***
	ELEC	2658	2401	2658	2572	2658	2572	2658	2658	2572	2658	2572	2658	31,293
	PK	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
4	EQ4371		FAN	COIL SU	PPLY FAN									

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שנים	s GIUI, BABELL	INE												
	ELEC	6895	6228	6895	6672	6895	6672	6895	6895	6672	6895	6672	6895	81,181
	PK	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
5	EQ4003		FC C	ENTRIF.	FAN C.V.									
	ELEC	7138	6447	7138	6908	7138	6908	7138	7138	6908	7138	6908	7138	84,042
	PK	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
1	EQ2001		GAS	FIRE TUE	E HOT WA	TER								
	GAS	890	940	266	6	0	0	0	0	0	0	184	689	2,974
	PK	5.7	4.0	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	2.6	3.3	5.7
1	EQ5020		HEAT	WATER O	IRC. PUN	œ c.v.								
	ELEC	7744	7976	3186	84	0	0	0	0	0	0	2194	5971	27,156
	PK	21.1	21.1	21.1	21.1	0.0	0.0	0.0	0.0	0.0	0.0	21.1	21.1	21.1
1	EQ5240		BOII	ER FORCE	D DRAFT	FAN								
	ELEC	1927	1985	793	21	0	0	0	0	0	0	546	1486	6,757
	PK	5.3	5.3	5.3	5.3	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	5.3
1	EQ5307		BOII	ER CONTE	OLS									
	ELEC	183	189	76	2	0	0	0	0	0	0	52	142	644
	PK	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
2	EQ2002		GAS	FIRE TUE										
	GAS	852	729	143	0	0	0	0	0	0	0	68	471	2,264
	PK	4.4	4.4	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	3.6	4.4
2	EQ5020			WATER C										
	ELEC	734	662	202	0	0	0	0	0	0	0	161	609	2,369
	PK	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2
2	EQ5240			ER FORCE										
	ELEC	188	170	52	0	0	0	0	0	0	0	41	156	607
	PK	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6
2	EQ5307			ER CONTE						_				545
	ELEC	159	144	44	0	0	0	0	0	0	0	35	133	515
	PK	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
2	EQ5061			ENSATE F			_	_	_	_	_	_	_	
	ELEC	9	8	2	0	0	0	0	0	0	0	2 0.0	7 0.0	29 0.0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	EQ5406			-UP WATE		_	_	_	_	_	•	•	•	2
	WATER	1	1	0	0	0	0	0	0	0	0	0	1 0.0	3 0.0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UTILITY PEAK CHECKSUMS - ALTERNATIVE 1 BLDG G101, BASELINE

-----UTILITY PEAK CHECKSUMS-----

Utility ELECTRIC DEMAND

Peak Value 680.1 (kW)
Yearly Time of Peak 15 (hr) 6 (mo)

Hour 15 Month 6

Eqp. Ref. Num.	Equipment Code Name	Equipment Description	Utility Demand (kW)	
Cooling E	quipment			
1	EQ1121S	AIR-CLD RECIP 20-35 TONS	52.3	7.69
2	E01120S		27.5	4.04
3	E01171L	AIR-CLD COND COMP 35-60 TONS	48.4	7.11
4	EQ1122L	AIR-CLD RECIP >55 TONS	190.7	28.03
Sub Total			318.8	46.88
Sub Total			0.0	0.00
Air Moving	g Equipment			
1		SUMMATION OF FAN ELECTRICAL DEMAND	22.7	3.34
2		SUMMATION OF FAN ELECTRICAL DEMAND	2.4	0.36
3		SUMMATION OF FAN ELECTRICAL DEMAND	3.6	0.53
4		SUMMATION OF FAN ELECTRICAL DEMAND	9.3	
5		SUMMATION OF FAN ELECTRICAL DEMAND	9.6	1.41
Sub Total			47.6	6.99
Sub Total			0.0	0.00
Miscellan	eous			
Lights			166.1	24.43
Base Uti	lities		0.0	0.00
Misc Equ	ipment		147.6	
Sub Total			313.7	46.13
Grand Tota	al		680.1	100.00

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CALIFORNIA TITLE 24 COMPLIANCE - ALTERNATIVE 1

BLDG G101, BASELINE

-----ENERGY USE SUMMARY

	ELEC (kWh/yr)	GAS (kBtu/yr)	WATER (1000 gal)	PERCENT OF TOTAL ENERGY (%)	TOTAL SOURCE ENERGY (kBtu/yr)	ADJUSTED UNIT SOURCE ENERGY (kBtu/yr-sf)
Primary Heating	8,551.1	523,832.6	3.1	7.3	638,965.9	5.4
Primary Cooling						
Compressor	263,412.8	0.0	0.0	11.9	2,697,353.0	23.0
Tower/Cond Fans	31,621.0	0.0	0.0	1.4	323,800.0	2.8
Condenser Pump	0.0	0.0	0.0	0.0	0.0	0.0
Other Accessories	4,632.0	0.0	0.0	0.2	47,431.8	0.4
Auxiliary						
Supply Fans	416,644.7	0.0	0.0	18.9	4,266,451.0	36.4
Circulation Pumps	157,303.7	0.0	0.0	7.1	1,610,793.6	13.7
Base Utilities	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	573,948.4	0.0	0.0	26.0	5,877,245.0	50.1
Lighting	729,764.0	0.0	0.0	33.1	7,472,800.5	62.2
Receptacle	439,233.8	0.0	0.0	19.9	4,497,765.0	37.4
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration	0.0	0.0	0.0	0.0	0.0	0.0
Totals	2,051,163.1	523,832.6	3.1	100.0	21,555,360.0	181.4

MONTHLY ENERGY CONSUMPTION - ALTERNATIVE 1 BLDG G101, ECO #1

------ MONTHLY ENERGY CONSUMPTION -----

Month	ELEC On Peak (kWh)	DEMAND On Peak (kW)	GAS On Peak (Therm)	WATER (1000 Gl)	GAS DMND On Peak (Thrm/hr)
Jan	143,472	361	1,092	1	7
Feb	129,940	361	1,022	1	6
March	141,114	361	190	0	3
April	128,629	361	0	0	0
May	194,990	592	0	0	0
June	216,860	658	0	0	0
July	213,780	647	0	0	0
Aug	222,424	651	0	0	0
Sept	192,762	615	0	0	0
Oct	175,877	533	0	0	0
Nov	130,522	361	115	0	3
Dec	138,163	361	633	0	4
Total	2,028,532	658	3,052	2	7

Building Energy Consumption = 60,147 (Btu/Sq Ft/Year)
Source Energy Consumption = 175,513 (Btu/Sq Ft/Year)

Floor Area = 120,182 (Sq Ft)

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EQUIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1 BLDG G101, ECO #1

----- EQUIPMENT ENERGY CONSUMPTION-----

						umption	_							
To	Dec	Nov	Oct	Sep	Aug	July	June	May	Apr	Mar	Feb	Jan	Code	Tum:
													LIGHTS	0
729,	60471	59214	62622	59214	63698	60471	61366	62622	59214	63698	55625	61547	ELEC	
16	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	PK	
													MISC LD	1
439,	35469	35169	38086	35169	39395	35469	37787	38086	35169	39395	33261	36778	ELEC	
14	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	PK	
													MISC LD	2
	0	0	0	0	0	0	0	0	0	0	0	0	GAS	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	PK	
													MISC LD	3
	0	0	0	0	0	0	0	0	0	0	0	0	OIL	
•	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	PK	
		_	_	_			_	_	_	_	_	_	MISC LD	4
	0	0	0	0	0	0	0	0	0	0	0	0	P STEAM	
(0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	PK	
	0	0	0	0	0	0	0	0	0	0	0	0	MISC LD P HOTH20	5
i	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	P HOTHZO	
'	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	PK	
	0	0	0	0	0	0	0	0	0	0	0	0	MISC LD P CHILL	6
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	PK	
								TONS	P 20-35	CLD RECI	ATR-		EQ1121S	1
38,	0	0	2193	5807	8481	8286	8372	4915	0	0	0	0	ELEC	_
3(0.0	0.0	18.3	29.9	35.9	35.9	36.8	30.3	0.0	0.0	0.0	0.0	PK	
									NS	ENSER FA	COND		EQ5200	1
4,0	0	0	206	706	1055	1039	1046	585	0	0	0	0	ELEC	
•	0.0	0.0	2.6	3.6	4.1	4.1	4.1	3.4	0.0	0.0	0.0	0.0	PK	
								.v.	R PUMP C	LED WATE	CHIL		EQ5001	1
26,	0	0	1606	4818	5431	5431	5256	4300	0	0	0	0	ELEC	
•	0.0	0.0	7.3	7.3	7.3	7.3	7.3	7.3	0.0	0.0	0.0	0.0	PK	
											CONT		EQ5313	1
1,:	0	0	66	198	223	223	216	177	0	0	0	0	ELEC	
(0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	PK	
	_	_								CLD RECI			EQ1120S	2
23,:	0	0	1878	3539	4992	4790	4832	3149	0	0	0	0	ELEC	
20	0.0	0.0	11.6	17.7	20.7	20.6	20.8	17.5	0.0	0.0	0.0	0.0	PK	

2	EQ5200		CON	DENSER F.	ANS									
	ELEC	0	0	0	0	370	600	596	616	428	171	0	0	2,781
	PK	0.0	0.0	0.0	0.0	1.9	2.3	2.3	2.3	2.1	1.6	0.0	0.0	2.3
2	EQ5001		CHI	LLED WAT	ER PUMP (.v.								
	ELEC	0	0	0	0	1640	1656	1711	1711	1656	842	0	0	9,216
	PK	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3	0.0	0.0	2.3
2	EQ5313		CON	TROLS										
	ELEC	0	0	0	0	214	216	223	223	216	110	0	0	1,202
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
3	EQ1171L		AIR	-CLD CON	D COMP 35	-60 TON	S							
-	ELEC	0	0	0	0	5635	9289	9268	9434	6420	2537	0	0	42,582
	PK	0.0	0.0	0.0	0.0	31.1	37.7	36.7	36.7	32.4	22.2	0.0	0.0	37.7
3	E05200		CON	DENSER F	ANS									
-	ELEC	0	0	0	0	669	1164	1177	1182	785	229	0	0	5,206
	PK	0.0	0.0	0.0	0.0	3.7	4.5	4.4	4.4	3.9	2.9	0.0	0.0	4.5
3	EQ5313		CON	TROLS										
	ELEC	0	0	0	0	175	216	223	223	195	76	0	0	1,109
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
4	EQ1122L		AIR	-CLD REC	IP >55 TO	ONS								
	ELEC	0	0	0	0	19020	31367	29872	30682	21433	12901	0	0	145,276
	PK	0.0	0.0	0.0	0.0	108.8	141.5	133.9	136.9	117.9	70.9	0.0	0.0	141.5
4	EQ5200		CON	DENSER F	ANS									
	ELEC	0	0	0	0	2126	3824	3691	3768	2524	1046	0	0	16,980
	PK	0.0	0.0	0.0	0.0	13.2	17.0	16.0	16.3	14.3	9.8	0.0	0.0	17.0
4	EQ5001		CHI	LLED WAT	ER PUMP (c.v.								
	ELEC	0	0	0	0	15698	15192	15698	15698	15192	15698	0	0	93,178
	PK	0.0	0.0	0.0	0.0	21.1	21.1	21.1	21.1	21.1	21.1	0.0	0.0	21.1
4	EQ5313		CON	TROLS										
	ELEC	0	0	0	0	223	216	223	223	216	223	0	0	1,325
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
1	EQ4003		FC	CENTRIF.	FAN C.V									
	ELEC	16899	15264	16899	16354	16899	16354	16899	16899	16354	16899	16354	16899	198,974
	PK	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
2	EQ4003		FC	CENTRIF.	FAN C.V									
	ELEC	1797	1623	17 9 7	1739	1797	1739	1797	1797	1739	1797	1739	1797	21,155
	PK	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
3	EQ4371		FAN	COIL SU	PPLY FAN									
	ELEC	2658	2401	2658	2572	2658	2572	2658	2658	2572	2658	2572	2658	31,294
	PK	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
4	EQ4371		FAN	COIL SU	PPLY FAN									

Trane Air Conditioning Economics
By: Trane Customer Direct Service Network

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BLDG	GIOI, ECO	# T												
	ELEC	6895	6228	6895	6672	6895	6672	6895	6895	6672	6895	6672	6895	81,182
	PK	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
5	EQ4003		FC C	ENTRIF.	FAN C.V.									
	ELEC	7138	6447	7138	6908	7138	6908	7138	7138	6908	7138	6908	7138	84,042
	PK	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
1	EQ2001		GAS	FIRE TU	JBE HOT WA									
	GAS	665	665	161	0	0	0	0	0	0	0	109	473	2,073
	PK	4.8	3.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.8	4.8
1	EQ5020		HEAT	WATER	CIRC. PUM	P C.V.								
	ELEC	7005	6562	1941	0	0	0	0	0	0	0	1456	4937	21,902
	PK	21.1	21.1	21.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.1	21.1	21.1
1	EQ5240		BOII	ER FOR	ED DRAFT	FAN								
	ELEC	1743	1633	483	0	0	0	0	0	0	0	362	1228	5,450
	PK	5.3	5.3	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	5.3
1	EQ5307		BOII	ER CONT							_			
	ELEC	166	156	46	0	0	0	0	0	0	0	35	117	519
	PK	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
2	EQ2002				JBE STEAM			_		_		7	161	979
	GAS	427	357	28	0	0	0	0	0	0	0.0	0.7	2.2	3.1
	PK	3.1	3.1	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.2	3.1
2	EQ5020				CIRC. PUM		_	_		_	_		272	1 500
	ELEC	570	499	110	0	0	0	0	0	0.0	0.0	28 2.3	373 2.3	1,580
	PK	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2
2	EQ5240			LER FOR			_	_	4	_		7	96	405
	ELEC	146	128	28	0	0	0	0	0	0	0	0.6	0.6	0.6
	PK	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6
2	EQ5307			LER CONT		_	_		•	•	0	6	81	344
	ELEC	124	108	24	0	0	0	0	0.0	0.0	0.0	0.5	0.5	0.5
	PK	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
2	EQ5061				RETURN PU		_	-	_	•	•	0	4	19
	ELEC	7	6	1	0	0	0	0	0	0	0.0	0.0	0.0	0.0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	EQ5406	_		LAW TU-E		_	_	_	•	•	^	^	0	2
	WATER	1	1	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UTILITY PEAK CHECKSUMS - ALTERNATIVE 1 BLDG G101, ECO #1

------ U T I L I T Y P E A K C H E C K S U M S -----

Utility ELECTRIC DEMAND

Peak Value 657.9 (kW)
Yearly Time of Peak 15 (hr) 6 (mo)

Hour 15 Month 6

Eqp.			Utility	Percnt
Ref.	Equipment		Demand	Of Tot
Num.	Code Name	Equipment Description	(kW)	(%)
		• •	` '	` `
Cooling	Equipment			
1	EQ1121S	AIR-CLD RECIP 20-35 TONS	48.5	7.37
2	~	AIR-CLD RECIP <20 TONS	25.8	3.92
3	-	AIR-CLD COND COMP 35-60 TONS	42.5	6.46
4	-	AIR-CLD RECIP >55 TONS	179.9	27.34
•				
Sub Tota	1		296.7	45.09
Sub Tota	1		0.0	0.00
Air Movi	ng Equipment			
1		SUMMATION OF FAN ELECTRICAL DEMAND	22.7	3.45
2		SUMMATION OF FAN ELECTRICAL DEMAND	2.4	0.37
3		SUMMATION OF FAN ELECTRICAL DEMAND	3.6	0.54
4		SUMMATION OF FAN ELECTRICAL DEMAND	9.3	1.41
5		SUMMATION OF FAN ELECTRICAL DEMAND	9.6	1.46
Sub Tota	1		47.6	7.23
Sub Tota	1		0.0	0.00
Miscella	neous			
Lights			166.1	25.25
Base Ut	ilities		0.0	0.00
Misc Eq	uipment		147.6	22.43
Sub Tota			313.7	47.68
Grand To	otal		657.9	100.00

CALIFORNIA TITLE 24 COMPLIANCE - ALTERNATIVE 1

BLDG G101, ECO #1

------ CALIFORNIA TITLE 24 COMPLIANCE REPORT

 Weather Name
 ATLANTA.

 Gross Conditioned Floor Area (sqft)
 120,182

 ACM Multiplier
 1.025

----- ENERGY USE SUMMARY

	ELEC (kWh/yr)	GAS (kBtu/yr)	WATER (1000 gal)	PERCENT OF TOTAL ENERGY (%)	TOTAL SOURCE ENERGY (kBtu/yr)	ADJUSTED UNIT SOURCE ENERGY (kBtu/yr-sf)
Primary Heating	6,736.1	305,157.1	2.1	4.5	390,195.8	3.3
Primary Cooling						
Compressor	249,092.3	0.0	0.0	11.8	2,550,711.3	21.8
Tower/Cond Fans	29,602.4	0.0	0.0	1.4	303,129.0	2.6
Condenser Pump	0.0	0.0	0.0	0.0	0.0	0.0
Other Accessories	4,738.8	0.0	0.0	0.2	48,525.4	0.4
Auxiliary						
Supply Fans	416,647.3	0.0	0.0	19.7	4,266,477.5	36.4
Circulation Pumps	152,717.8	0.0	0.0	7.2	1,563,833.9	13.3
Base Utilities	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	569,365.1	0.0	0.0	26.9	5,830,311.5	49.7
Lighting	729,764.0	0.0	0.0	34.5	7,472,800.5	62.2
Receptacle	439,233.8	0.0	0.0	20.7	4,497,765.0	37.4
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration	0.0	0.0	0.0	0.0	0.0	0.0
Totals	2,028,532.6	305,157.1	2.1	100.0	21,093,440.0	177.4

MONTHLY ENERGY CONSUMPTION - ALTERNATIVE 1

BLDG G101, ECO #2

------ MONTHLY ENERGY CONSUMPTION -----

Month	ELEC On Peak (kWh)	DEMAND On Peak (kW)	GAS On Peak (Therm)	WATER (1000 Gl)	GAS DMND On Peak (Thrm/hr)
Jan	143,178	361	1,417	1	8
Feb	130,114	361	1,300	1	7
March	141,196	361	267	0	5
April	128,629	361	0	0	0
May	196,672	599	0	0	0
June	220,702	668	0	0	0
July	217,685	657	0	0	0
Aug	225,859	661	0	0	0
Sept	194,945	624	0	0	0
Oct	175,221	536	0	0	0
Nov	130,386	361	146	0	4
Dec	138,721	361	883	1	6
Total	2,043,306	668	4,012	3	8

Building Energy Consumption = 61,365 (Btu/Sq Ft/Year)
Source Energy Consumption = 177,613 (Btu/Sq Ft/Year)

Floor Area = 120,182 (Sq Ft)

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EQUIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1 BLDG G101, ECO #2

----- EQUIPMENT ENERGY CONSUMPTION------

еf	Equip					Mon	-						_	
1M	Code	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Tota.
0	LIGHTS											50014	50.454	
	ELEC	61547	55625	63698	59214	62622	61366	60471	63698	59214	62622	59214	60471	729,76
	PK	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.
1	MISC LD													
	ELEC	36778	33261	39395	35169	38086	37787	35469	39395	35169	38086	35169	35469	439,23
	PK	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.
2	MISC LD									_		_	_	
	GAS	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
3	MISC LD								_	_		_	_	
	OIL	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
4	MISC LD			0	0	0	0	0	0	0	0	0	0	
	P STEAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	J
5	MISC LD P HOTH20	0	0	0	0	0	0	0	0	0	0	0	0	
	PK HOIHZO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
		0.0	0.0	0.0	0.0	0.0	•••	0.0	•••	200				- 1
6	MISC LD P CHILL	0	0	0	0	0	0	o	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1	EQ1121S		AIR	-CLD REC	IP 20-35	TONS								
	ELEC	0	0	0	0	5230	8941	8840	8949	6153	2095	0	0	40,2
	PK	0.0	0.0	0.0	0.0	31.8	38.7	37.6	37.7	31.4	18.8	0.0	0.0	38
1	EQ5200			DENSER F										
	ELEC	0	0	0	0	625	1128	1123	1128	753	198	0	0	4,9
	PK	0.0	0.0	0.0	0.0	3.5	4.3	4.3	4.3	3.8	2.7	0.0	0.0	4
1	EQ5001			LLED WAT							4770		•	25.0
	ELEC	0	0	0	0	4300	5256	5431	5431	4818	1730	0	0	26,9
	PK	0.0	0.0	0.0	0.0	7.3	7.3	7.3	7.3	7.3	7.3	0.0	0.0	7
1	EQ5313	_		TROLS	_		0.1.5	202	222	100	71	0	0	1,1
	ELEC	0	0	0	0	177	216	223	223	198				•
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0
2	EQ1120S	_		-CLD REC				5654	E036	2502	1775		^	24.0
	ELEC	0	0	0	0	3241	5117	5054	5236	3693	1735	0	0	24,0
	PK	0.0	0.0	0.0	0.0	18.6	22.2	21.9	22.1	19.0	12.0	0.0	0.0	22

2	EQ5200			DENSER F										
	ELEC	0	0	0	0	387	643	639	656	452	161	0	0	2,938
	PK	0.0	0.0	0.0	0.0	2.1	2.5	2.5	2.5	2.2	1.7	0.0	0.0	2.5
2	EQ5001		CHI	LLED WAT	ER PUMP	c.v.								
	ELEC	0	0	0	0	1598	1656	1711	1711	1656	658	0	0	8,991
	PK	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3	0.0	0.0	2.3
2	EQ5313		CON	TROLS										
	ELEC	0	0	0	0	208	216	223	223	216	86	0	0	1,173
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
3	EQ1171L		ATR	-CLD CON	D COMP 3.	5-60 TON	s						•	
_	ELEC	0	0	0	0	6062	10762	10633	10668	7088	1862	0	0	47,075
	PK	0.0	0.0	0.0	0.0	35.2	43.0	41.6	41.6	37.0	24.4	0.0	0.0	43.0
3	EQ5200		CON	DENSER F	ANS									
J	ELEC	0	0	0	0	731	1346	1348	1336	875	180	0	0	5,816
	PK	0.0	0.0	0.0	0.0	4.2	5.0	5.0	5.0	4.5	3.2	0.0	0.0	5.0
-	TOE 313		CON	mpor a										
3	EQ5313 ELEC	0	0	TROLS 0	0	163	216	223	223	180	61	0	0	1,067
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
	111	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.3
4	EQ1122L		AIR	-CLD REC	IP >55 T	ONS								
	ELEC	0	0	0	0	19728	32444	31136	31769	22214	13292	0	0	150,583
	PK	0.0	0.0	0.0	0.0	109.7	142.4	135.0	137.9	118.7	71.1	0.0	0.0	142.4
4	EQ5200		CON	DENSER F	ANS									
	ELEC	0	0	0	0	2204	3955	3852	3904	2613	1075	0	0	17,603
	PK	0.0	0.0	0.0	0.0	13.3	17.1	16.1	16.4	14.4	9.9	0.0	0.0	17.1
4	EQ5001		CHI	LLED WAT	ER PUMP	c.v.								
	ELEC	0	0	0	0	15698	15192	15698	15698	15192	15698	0	0	93,178
	PK	0.0	0.0	0.0	0.0	21.1	21.1	21.1	21.1	21.1	21.1	0.0	0.0	21.1
4	E05313		CON	TROLS										
	ELEC	0	0	0	0	223	216	223	223	216	223	0	0	1,325
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
1	EQ4003		FC	CENTRIF.	FAN C.V	•								
	ELEC	16899	15264	16899	16354	16899	16354	16899	16899	16354	16899	16354	16899	198,974
	PK	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
2	EQ4003		FC -	CENTRIF.	FAN C.V									
_	ELEC	1797	1623	1797	1739	1797	1739	1797	1797	1739	1797	1739	1797	21,155
	PK	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
3	EQ4371		wan.	COTT. ST	PPLY FAN									
_	ELEC	2658	2401	2658	2572	2658	2572	2658	2658	2572	2658	2572	2658	31,294
	PK	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
4	PO4371		***	COTT C'	PPLY FAN									
4	EQ4371		PAN	טע יודרט	FELL FAN									

Trane Air Conditioning Economics
By: Trane Customer Direct Service Network

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BLDG	G101, ECO #	2												
	ELEC	6895	6228	6895	6672	6895	6672	6895	6895	6672	6895	6672	6895	81,182
	PK	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
5	EQ4003		FC C	ENTRIF.										
	ELEC	7138	6447	7138	6908	7138	6908	7138	7138	6908	7138	6908	7138	84,042
	PK	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
1	EQ2001			FIRE TUB										
	GAS	674	670	152	0	0	0	0	0	0	0	109	473	2,079
	PK	4.9	3.6	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.8	4.9
1	EQ5020			WATER C										
	ELEC	6583	6562	1941	0	0	0	0	0	0	0	1308	5170	21,564
	PK	21.1	21.1	21.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.1	21.1	21.1
1	EQ5240		BOII	ER FORCE	D DRAFT	FAN								
	ELEC	1638	1633	483	0	0	0	0	0	0	0	326	1286	5,365
	PK	5.3	5.3	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	5.3
1	EQ5307		BOII	ER CONTE										
	ELEC	156	156	46	0	0	0	0	0	0	0	31	123	511
	PK	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
2	EQ2002		GAS	FIRE TUE										
	gas	743	629	115	0	0	0	0	0	0	0	36	410	1,933
	PK	4.1	4.1	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	3.3	4.1
2	EQ5020			WATER C										
	ELEC	734	616	166	0	0	0	0	0	0	0	62	550	2,127
	PK	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.
2	EQ5240			ER FORCE										
	ELEC	188	158	42	0	0	0	0	0	0	0	16	141	545
	PK	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6
2	EQ5307			ER CONTR										
	ELEC	159	134	36	0	0	0	0	0	0	0	14	119	463
	PK	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
2	EQ5061			ENSATE F									_	
	ELEC	9	7	2	0	0	0	0	0	0	0	1	7	26
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	EQ5406			-UP WATE						_		-	_	_
	WATER	1	1	0	0	0	0	0	0	0	0	0	1	3
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UTILITY PEAK CHECKSUMS - ALTERNATIVE 1 BLDG G101, ECO #2

-----UTILITY PEAK CHECKSUMS-----

Utility ELECTRIC DEMAND

Peak Value 668.4 (kW)
Yearly Time of Peak 15 (hr) 6 (mo)

Hour 15 Month 6

Eqp.			Utility	
Ref.	Equipment		Demand	
Num.	Code Name	Equipment Description	(kW)	(%)
Cooling Eq	quipment			
_		00 05	F0 C	
1	-	AIR-CLD RECIP 20-35 TONS	50.6	
2	-	AIR-CLD RECIP <20 TONS	27.3	
3	-	AIR-CLD COND COMP 35-60 TONS	48.3	
4	EQ1122L	AIR-CLD RECIP >55 TONS	180.9	27.06
Sub Total			307.1	45.95
Sub Total			0.0	0.00
Air Moving	g Equipment			
1		SUMMATION OF FAN ELECTRICAL DEMAND	22.7	3.40
2		SUMMATION OF FAN ELECTRICAL DEMAND	2.4	0.36
3		SUMMATION OF FAN ELECTRICAL DEMAND	3.6	0.53
4		SUMMATION OF FAN ELECTRICAL DEMAND	9.3	1.39
5		SUMMATION OF FAN ELECTRICAL DEMAND	9.6	1.44
and maked			47.6	7.12
Sub Total			4/.0	7.12
Sub Total			0.0	0.00
Miscellane	oous			
Lights			166.1	24.86
Base Util	lities		0.0	0.00
Misc Equi			147.6	22.08
Sub Total	•		313.7	46.94
Grand Tota	11		668.4	100.00

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CALIFORNIA TITLE 24 COMPLIANCE - ALTERNATIVE 1

BLDG G101, ECO #2

----- ENERGY USE SUMMARY

	ELEC (kWh/yr)	GAS (kBtu/yr)	WATER (1000 gal)	PERCENT OF TOTAL ENERGY (%)	TOTAL SOURCE ENERGY (kBtu/yr)	ADJUSTED UNIT SOURCE ENERGY (kBtu/yr-sf)
Primary Heating	6,910.0	401,179.3	2.8	5.8	493,052.7	4.2
Primary Cooling						
Compressor	261,940.2	0.0	0.0	12.1	2,682,274.0	22.9
Tower/Cond Fans	31,311.7	0.0	0.0	1.4	320,632.7	2.7
Condenser Pump	0.0	0.0	0.0	0.0	0.0	0.0
Other Accessories	4,672.8	0.0	0.0	0.2	47,849.6	0.4
Auxiliary						
Supply Fans	416,647.3	0.0	0.0	19.3	4,266,477.5	36.4
Circulation Pumps	152,826.3	0.0	0.0	7.1	1,564,945.0	13.3
Base Utilities	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	569,473.6	0.0	0.0	26.4	5,831,422.5	49.7
Lighting	729,764.0	0.0	0.0	33.8	7,472,800.5	62.2
Receptacle	439,233.8	0.0	0.0	20.3	4,497,765.0	37.4
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration	0.0	0.0	0.0	0.0	0.0	0.0
Totals	2,043,306.1	401,179.3	2.8	100.0	21,345,796.0	179.6

MONTHLY ENERGY CONSUMPTION - ALTERNATIVE 1 BLDG G101, ECO #3

------ MONTHLY ENERGY CONSUMPTION -----

	ELEC	DEMAND	GAS		GAS DMND
	On Peak	On Peak	On Peak	WATER	On Peak
Month	(kWh)	(kW)	(Therm)	(1000 Gl)	(Thrm/hr)
Jan	144,547	361	1,712	1	9
Feb	131,981	361	1,615	1	7
March	142,217	361	367	0	5
April	128,629	361	0	0	0
May	196,364	606	0	0	0
June	221,874	677	0	0	0
July	218,308	665	0	0	0
Aug	226,582	668	0	0	0
Sept	195,025	632	0	0	0
Oct	172,892	540	0	0	0
Nov	131,580	361	240	0	4
Dec	139,831	361	1,117	1	6
Total	2,049,830	677	5,052	3	9

Building Energy Consumption = 62,416 (Btu/Sq Ft/Year) Source Energy Consumption = 179,079 (Btu/Sq Ft/Year) Floor Area = 120,182 (Sq Ft)

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5,018

26,295

7.3

1,081

24,084

22.4

0.3

4.5

EQUIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1 BLDG G101, ECO #3

0

0

0

0

0.0

0.0

0.0

0.0

ELEC

PK

1 EQ5001

PK

1 EQ5313

PK

ELEC

2 EQ1120S

ELEC

PK

ELEC

0

0

0.0

0

0.0

0

0.0

AIR-CLD RECIP <20 TONS

CHILLED WATER PUMP C.V.

0.0

0

0.0

0

CONTROLS

0.0

0

0

0.0

0.0

0

0.0

0

0

0.0

0.0

0.0

626

3.7

4008

7.3

165

0.3

18.8

0 3235

1158

4.5

5256

7.3

216

0.3

5140

22.4

1149

4.4

5431

7.3

223

0.3

5242

22.2

1141

4.4

5431

7.3

223

0.3

5076

22.0

760

3.9

4599

7.3

189

0.3

3688

19.0

183

2.7

1569

7.3

65

0.3

1702

12.0

0.0

0

0.0

0.0

0

0.0

0.0

0

0.0

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O LIGHTS ELEC 61547 55625 63698 59214 62622 61366 60471 63698 59214 62622 59214 60471 729,76 PK 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.1 166.	Ref	Equip					Mon	thly Con	sumption						
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2 MISC LD GAS															•
GAS		PK	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6
PK 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	2	MISC LD													
3 MISC LD OIL		GAS													0
OIL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PK 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	3	MISC LD													
4 MISC LD P STEAM 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		OIL						0							0
P STEAM 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PK 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	4	MISC LD													
5 MISC LD P HOTH2O		P STEAM					0			0					0
P HOTH2O 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PK 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	5	MISC LD													
6 MISC LD P CHILL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		P HOTH2O													0
P CHILL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,
PR 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	6														•
1 EQ1121S AIR-CLD RECIP 20-35 TONS ELEC 0 0 0 5199 9152 8961 9099 6179 1914 0 0 40,504															0
ELEC 0 0 0 0 5199 9152 8961 9099 6179 1914 0 0 40,504		PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
·	1			AIR											
PK 0.0 0.0 0.0 0.0 33.1 40.4 38.9 39.0 32.8 19.2 0.0 0.0 40.4															40,504
		PK	0.0	0.0	0.0	0.0	33.1	40.4	38.9	39.0	32.8	19.2	0.0	0.0	40.4
1 EQ5200 CONDENSER FANS															

----- EQUIPMENT ENERGY CONSUMPTION -----

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2	EQ5200			DENSER F										
	ELEC	0	0	0	0	387	647	642	657	452	159	0	0	2,943
	PK	0.0	0.0	0.0	0.0	2.1	2.5	2.5	2.5	2.2	1.7	0.0	0.0	2.5
2	EQ5001		CHI	LLED WAT	ER PUMP C	.v.								
	ELEC	0	0	0	0	1569	1656	1711	1711	1656	658	0	0	8,961
	PK	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3	0.0	0.0	2.3
2	E05313		COM	TROLS										
-	ELEC	0	0	0	0	205	216	223	223	216	86	0	0	1,169
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
							_							
3	EQ1171L	•		-CLD CON	D COWE 35	6062 i-60	s 10762	10633	10668	7088	1862	0	0	47,075
	ELEC	0	0	0.0	0.0	35.2	43.0	41.6	41.6	37.0	24.4	0.0	0.0	43.0
	PK	0.0	0.0	0.0	0.0	33.2	43.0	41.0	41.0	37.0	24.4	0.0	0.0	43.0
3	EQ5200		CON	DENSER F										
	ELEC	0	0	0	0	731	1346	1348	1336	875	180	0	0	5,816
	PK	0.0	0.0	0.0	0.0	4.2	5.0	5.0	5.0	4.5	3.2	0.0	0.0	5.0
3	EQ5313		CON	TROLS										
	ELEC	0	0	0	0	163	216	223	223	180	61	0	0	1,067
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
	EQ1122L		212	_מדה חפת	IP >55 TO	we								
*	ELEC	0	0	O REC	0	19778	33249	31542	32253	22455	12109	0	0	151,385
	PK	0.0	0.0	0.0	0.0	113.7	148.8	140.5	143.0	124.1	73.9	0.0	0.0	148.8
4	EQ5200	0	CON:	DENSER F O	ANS 0	2221	4056	3903	3964	2651	992	0	0	17,787
	ELEC PK	0.0	0.0	0.0	0.0	13.8	17.7	16.8	17.1	15.1	10.2	0.0	0.0	17.7
	PK	0.0	0.0	0.0	0.0	13.6	1/./	10.0	17.1	13.1	10.2	0.0	0.0	2,
4	EQ5001				ER PUMP (_	_	
	ELEC	0	0	0	0	15698	15192	15698	15698	15192	15044	0	0	92,524
	PK	0.0	0.0	0.0	0.0	21.1	21.1	21.1	21.1	21.1	21.1	0.0	0.0	21.1
4	EQ5313		CON	TROLS										
	ELEC	0	0	0	0	223	216	223	223	216	214	0	0	1,315
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
1	EQ4003		FC	CENTRIF.	FAN C.V.	•								
_	ELEC	16899	15264	16899	16354	16899	16354	16899	16899	16354	16899	16354	16899	198,974
	PK	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
,	EQ4003		EC	CENTRATE	FAN C.V.									
2	ELEC	1797	1623	1797	1739	1797	1739	1797	1797	1739	1797	1739	1797	21,155
	PK	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
_														
3	EQ4371	2660	FAN 2401	2658	PPLY FAN 2572	2658	2572	2658	2658	2572	2658	2572	2658	31,294
	ELEC PK	2658 3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	r r	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.3	5.5	3.0	2.0	3.3
4	EQ4371		FAN	COIL SU	PPLY FAN									

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BLDG	G101, ECO	#3												
	ELEC	6895	6228	6895	6672	6895	6672	6895	6895	6672	6895	6672	6895	81,182
	PK	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
5	EQ4003		FC C	ENTRIF.	FAN C.V.									
	ELEC	7138	6447	7138	6908	7138	6908	7138	7138	6908	7138	6908	7138	84,042
	PK	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
1	EQ2001			FIRE TUB										
	GAS	860	886	224	0	0	0	0	0	0	0	172	646	2,788
	PK	5.4	3.8	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	3.4	5.4
1	EQ5020		HEAT		IRC. PUM									
	ELEC	7659	7976	2701	0	0	0	0	0	0	0	2131	5971	26,438
	PK	21.1	21.1	21.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.1	21.1	21.1
1	EQ5240		BOIL	ER FORCE										
	ELEC	1906	1985	672	0	0	0	0	0	0	0	530	1486	6,578
	PK	5.3	5.3	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	5.3
1	EQ5307			ER CONTR										
	ELEC	182	189	64	0	0	0	0	0	0	0	51	142	627
	PK	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
2	EQ2002			FIRE TUB										
	GAS	852	729	143	0	0	0	0	0	0	0	68	471	2,264
	PK	4.4	4.4	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	3.6	4.4
2	EQ5020			WATER C										
	ELEC	734	662	202	0	0	0	0	0	0	0	161	609	2,369
	PK	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.
2	EQ5240			ER FORCE										
	ELEC	188	170	52	0	0	0	0	0	0	0	41	156	607
	PK	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6
2	EQ5307		BOIL	ER CONTR										
	ELEC	159	144	44	0	0	0	0	0	0	0	35	133	515
	PK	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
2	EQ5061			ENSATE R										
	ELEC	9	8	2	0	0	0	0	0	0	0	2	7	29
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	EQ5406			-UP WATE						_	_	_		
	WATER	1	1	0	0	0	0	0	0	0	0	0	1	3
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UTILITY PEAK CHECKSUMS - ALTERNATIVE 1 BLDG G101, ECO #3

Utility ELECTRIC DEMAND

Peak Value 677.4 (kW)
Yearly Time of Peak 15 (hr) 6 (mo)

Hour 15 Month 6

Eqp. Ref. Num. Cooling E	Equipment Code Name	Equipment Description	Utility Demand (kW)	
COOLING E	Squipment			
1 2 3 4	EQ1121S EQ1120S EQ1171L EQ1122L	AIR-CLD COND COMP 35-60 TONS	52.4 27.5 48.3 187.9	4.06 7.13
Sub Total	L		316.1	46.67
Sub Total	L		0.0	0.00
Air Movin	ng Equipment			
1		SUMMATION OF FAN ELECTRICAL DEMAND	22.7	3.35
2		SUMMATION OF FAN ELECTRICAL DEMAND	2.4	0.36
3		SUMMATION OF FAN ELECTRICAL DEMAND	3.6	0.53
4		SUMMATION OF FAN ELECTRICAL DEMAND	9.3	1.37
5		SUMMATION OF FAN ELECTRICAL DEMAND	9.6	1.42
Sub Total	1		47.6	7.02
Sub Total	ı		0.0	0.00
Miscellar	neous			
Lights			166.1	24.53
Base Uti	ilities		0.0	0.00
Misc Equ	lipment		147.6	
Sub Total	l		313.7	46.31
Grand Tot	tal		677.4	100.00

CALIFORNIA TITLE 24 COMPLIANCE - ALTERNATIVE 1

BLDG G101, ECO #3

-----ENERGY USE SUMMARY

	ELEC (kWh/yr)	GAS (kBtu/yr)	WATER (1000 gal)	PERCENT OF TOTAL ENERGY (%)	TOTAL SOURCE ENERGY (kBtu/yr)	ADJUSTED UNIT SOURCE ENERGY (kBtu/yr-sf)
Primary Heating	8,355.6	505,157.9	3.1	7.1	617,306.6	5.3
Primary Cooling						
Compressor	263,047.7	0.0	0.0	12.0	2,693,614.5	23.0
Tower/Cond Fans	31,563.6	0.0	0.0	1.4	323,212.2	2.8
Condenser Pump	0.0	0.0	0.0	0.0	0.0	0.0
Other Accessories	4,632.0	0.0	0.0	0.2	47,431.8	0.4
Auxiliary						
Supply Fans	416,647.3	0.0	0.0	19.0	4,266,477.5	36.4
Circulation Pumps	156,586.3	0.0	0.0	7.1	1,603,447.4	13.7
Base Utilities	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	573,233.6	0.0	0.0	26.1	5,869,925.0	50.1
Lighting	729,764.0	0.0	0.0	33.2	7,472,800.5	62.2
Receptacle	439,233.8	0.0	0.0	20.0	4,497,765.0	37.4
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration	0.0	0.0	0.0	0.0	0.0	0.0
Totals	2,049,830.4	505,157.9	3.1	100.0	21,522,058.0	181.1

MONTHLY ENERGY CONSUMPTION - ALTERNATIVE 1

BLDG G101, ECO #6

------ MONTHLY ENERGY CONSUMPTION ------

Month	ELEC On Peak (kWh)	DEMAND On Peak (kW)	GAS On Peak (Therm)	WATER (1000 Gl)	GAS DMND On Peak (Thrm/hr)
Jan	145,103	361	2,322	1	10
Feb	132,515	361	2,247	1	9
March	143,330	361	649	1	6
April	128,791	365	10	0	2
May	195,258	607	0	0	0
June	222,159	680	0	0	0
July	218,605	667	0	0	0
Aug	226,869	671	0	0	0
Sept	194,981	633	0	0	0
0ct	170,947	540	0	0	0
Nov	132,043	361	440	1	5
Dec	140,306	361	1,655	1	7
Total	2,050,904	680	7,324	5	10

Building Energy Consumption = 64,337 (Btu/Sq Ft/Year)
Source Energy Consumption = 181,161 (Btu/Sq Ft/Year)

Floor Area = 120,182 (Sq Ft)

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EQUIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1 BLDG G101, ECO #6

------EQUIPMENT ENERGY CONSUMPTION------

əf	Equip -					Mont							_	
um	Code	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
0	LIGHTS							50484		50014	62622	59214	60471	729,764
	ELEC	61547	55625	63698	59214	62622	61366	60471	63698	59214	166.1	166.1	166.1	166.1
	PK	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	100.1	100.1	100.1
1	MISC LD							35450	20205	25160	38086	35169	35469	439,234
	ELEC	36778	33261	39395	35169	38086	37787	35469	39395	35169	147.6	147.6	147.6	147.6
	PK	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.5	147.0	147.0	147.0
2	MISC LD					_	_		•	0	0	0	0	0
	GAS	0	0	0	0	0	0	0	0			0.0	0.0	0.0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MISC LD			_	_	_		•	0	0	0	0	0	0
	OIL	0	0	0	0	0	0	0		0.0	0.0	0.0	0.0	0.0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	MISC LD		0	0	0	0	0	0	0	0	0	0	0	0
	P STEAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	•		•••	,
5	MISC LD P HOTH2O	0	0	0	0	0	0	0	0	o	0	0	0	c
	P HOTHEO PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Q
	FR	0.0	0.0	•••	•••	***								•
6	MISC LD P CHILL	0	0	0	0	0	o	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	EQ1121S		AIR	-CLD REC	IP 20-35	TONS								
	ELEC	0	0	0	0	4981	9153	8962	9099	6179	1519	0	0	39,893
	PK	0.0	0.0	0.0	0.0	29.6	40.4	38.9	39.0	32.8	19.2	0.0	0.0	40.4
1	EQ5200		CON	DENSER F.	ans							_	_	
	ELEC	0	0	0	0	609	1158	1141	1149	760	153	0	0	4,971
	PK	0.0	0.0	0.0	0.0	3.7	4.5	4.4	4.4	3.9	2.7	0.0	0.0	4.5
1	EQ5001		CHI	LLED WAT								_		05 040
	ELEC	0	0	0	0	3847	5256	5431	5431	4599	1285	0	0	25,849
	PK	0.0	0.0	0.0	0.0	7.3	7.3	7.3	7.3	7.3	7.3	0.0	0.0	7.3
1	EQ5313			TROLS					000	100	53	0	0	1,062
	ELEC	0	0	0	0	158	216	223	223	189		0.0	0.0	0.3
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	U. .
2	EQ1120S			-CLD REC			5145	5075	5242	2500	1005	0	0	23,288
	ELEC	0	0	0	0	3047	5140	5076	5242	3688	1095	0.0	0.0	23,286
	PK	0.0	0.0	0.0	0.0	18.8	22.4	22.0	22.2	19.0	12.0	0.0	0.0	44.5

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2	EQ5200			DENSER FA								_	_	
	ELEC	0	0	0	0	371	647	642	657	452	113 1.7	0 0.0	0 0.0	2,882 2.5
	PK	0.0	0.0	0.0	0.0	2.1	2.5	2.5	2.5	2.2	1.7	0.0	0.0	2.5
2	EQ5001		CHI	LLED WAT	ER PUMP C									
	ELEC	0	0	0	0	1355	1656	1711	1711	1656	455	0	0	8,544
	PK	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3	0.0	0.0	2.3
2	EQ5313		CON	TROLS										
-	ELEC	0	0	0	0	177	216	223	223	216	59	0	0	1,114
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
_				-CLD CON	n cover 35	-60 TON	8							
3	EQ1171L	0	O AIR	ס תונים –	O COMP 3:	5992	10762	10633	10668	7088	1747	0	0	46,890
	ELEC	0.0	0.0	0.0	0.0	34.6	43.0	41.6	41.6	37.0	24.4	0.0	0.0	43.0
	PK	0.0	0.0	0.0	0.0	34.0	43.0	41.0	41.0	37.0				
3	EQ5200			DENSER F.								_		
	ELEC	0	0	0	0	725	1346	1348	1336	875	170	0	0	5,800
	PK	0.0	0.0	0.0	0.0	4.2	5.0	5.0	5.0	4.5	3.2	0.0	0.0	5.0
3	EQ5313		CON	TROLS										
_	ELEC	0	0	0	0	157	216	223	223	180	56	0	0	1,055
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
	DO11221		3.70	OID BEC	IP >55 TO	OM C								
4	EQ1122L ELEC	0	0	CIII) KBC	0 16 522 10	19619	33502	31806	32508	22415	11912	0	0	151,762
	PK	0.0	0.0	0.0	0.0	115.8	151.1	142.8	145.3	125.5	74.1	0.0	0.0	151.1
4	EQ5200	_		DENSER F.			4000	2025	2005	0647	976	0	0	17,845
	ELEC	0	0	0	0.0	2204 14.0	4086 18.1	3936 17.1	3996 17.3	26 4 7 15.3	10.2	0.0	0.0	18.1
	PK	0.0	0.0	0.0	0.0	14.0	10.1	17.1	17.3	13.3	10.2	0.0	0.0	10.1
4	EQ5001		CHI	LLED WAT	ER PUMP (
	ELEC	0	0	0	0	15698	15192	15698	15698	15192	15044	0	0	92,524
	PK	0.0	0.0	0.0	0.0	21.1	21.1	21.1	21.1	21.1	21.1	0.0	0.0	21.1
4	EQ5313		CON	TROLS										
-	ELEC	0	0	0	0	223	216	223	223	216	214	0	0	1,315
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
	T04007		P.C	OEWIID TE	FAN C.V									
1	EQ4003 ELEC	16899	15264	16899	16354	16899	16354	16899	16899	16354	16899	16354	16899	198,974
	PK	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
2	EQ4003				FAN C.V						4 202	1770	1707	01 155
	ELEC	1797	1623	1797	1739	1797	1739	1797	1797	1739	1797	1739 2.4	1797 2.4	21,155 2.4
	PK	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
3	EQ4371		FAN	COIL SU	PPLY FAN									
	ELEC	2658	2401	2658	2572	2658	2572	2658	2658	2572	2658	2572	2658	31,294
	PK	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
4	EQ4371		FAN	COIL SU	PPLY FAN									

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BLDG	G101, ECO #6	i												
	ELEC	6895	6228	6895	6672	6895	6672	6895	6895	6672	6895	6672	6895	81,182
	PK	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
5	EQ4003		FC C	ENTRIF.	FAN C.V.									
	ELEC	7138	6447	7138	6908	7138	6908	7138	7138	6908	7138	6908	7138	84,042
	PK	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
1	EQ2001			FIRE TUB										
	GAS	890	940	266	6	0	0	0	0	0	0	184	689	2,975
	PK	5.7	4.0	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	2.6	3.3	5.7
1	EQ5020		HEAT		IRC. PUM									
	ELEC	7744	7976	3186	84	0	0	0	0	0	0	2194	5971	27,156
	PK	21.1	21.1	21.1	21.1	0.0	0.0	0.0	0.0	0.0	0.0	21.1	21.1	21.1
1	EQ5240			ER FORCE										
	ELEC	1927	1985	793	21	0	0	0	0	0	0	546	1486	6,757
	PK	5.3	5.3	5.3	5.3	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	5.3
1	EQ5307			ER CONTR										
	ELEC	183	189	76	2	0	0	0	0	0	0	52	142	644
	PK	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
2	EQ2002			FIRE TUB										
	GAS	1432	1307	383	5	0	0	0	0	0	0	256	966	4,349
	PK	5.4	5.5	3.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	3.1	4.5	5.5
2	EQ5020			WATER C			_	_	_	_		44.0		2 000
	ELEC	1035	1021	536	37	0	0	0	0	0	0	419	929	3,977
	PK	2.3	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2
2	EQ5240			ER FORCE						_	_			
	ELEC	265	262	137	9	0	0	0	0	0	0	107	238	1,019
	PK	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6
2	EQ5307		BOIL	ER CONTR	OLS									
	ELEC	225	222	117	8	0	0	0	0	0	0	91	202	865
	PK	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
2	EQ5061		COND		ETURN PU									
	ELEC	12	12	6	0	0	0	0	0	0	0	5	11	48
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	EQ5406			-UP WATE				_	_	_	_		_	_
	WATER	1	1	1	0	0	0	0	0	0	0	1	1	5
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UTILITY PEAK CHECKSUMS - ALTERNATIVE 1 BLDG G101, ECO #6

-----UTILITY PEAK CHECKSUMS------

Utility ELECTRIC DEMAND

Peak Value 680.1 (kW)
Yearly Time of Peak 15 (hr) 6 (mo)

Hour 15 Month 6

Eqp. Ref. Num.	Equipment Code Name	Equipment Description	Utility Demand (kW)	Percnt Of Tot (%)
Cooling	Equipment			
1	EQ1121S	AIR-CLD RECIP 20-35 TONS	52.4	7.70
2	EQ1120S		27.5	4.05
3	EQ1171L	AIR-CLD COND COMP 35-60 TONS	48.3	7.10
4	EQ1122L		190.6	28.03
Sub Tot	al		318.8	46.88
Sub Tot	al		0.0	0.00
Air Mov	ing Equipment			
1		SUMMATION OF FAN ELECTRICAL DEMAND	22.7	3.34
2		SUMMATION OF FAN ELECTRICAL DEMAND	2.4	0.36
3		SUMMATION OF FAN ELECTRICAL DEMAND	3.6	0.53
4		SUMMATION OF FAN ELECTRICAL DEMAND	9.3	1.36
5		SUMMATION OF FAN ELECTRICAL DEMAND	9.6	1.41
Sub Tot	cal		47.6	6.99
Sub Tot	cal		0.0	0.00
Miscell	laneous			
Lights	3		166.1	24.43
Base t	Jtilities		0.0	0.00
Misc E	Equipment		147.6	
Sub Tot	al		313.7	46.13
Grand T	Total		680.1	100.00

Trane Air Conditioning Economics

By: Trane Customer Direct Service Network

CALIFORNIA TITLE 24 COMPLIANCE - ALTERNATIVE 1 BLDG G101, ECO #6

----- E N E R G Y U S E S U M M A R Y

	ELEC (kWh/yr)	GAS (kBtu/yr)	WATER (1000 gal)	PERCENT OF TOTAL ENERGY (%)	TOTAL SOURCE ENERGY (kBtu/yr)	ADJUSTED UNIT SOURCE ENERGY (kBtu/yr-sf)
Primary Heating	9,332.1	732,370.8	5.3	9.9	866,477.4	7.4
Primary Cooling						
Compressor	261,833.2	0.0	0.0	11.6	2,681,178.3	22.9
Tower/Cond Fans	31,497.1	0.0	0.0	1.4	322,531.4	2.8
Condenser Pump	0.0	0.0	0.0	0.0	0.0	0.0
Other Accessories	4,547.7	0.0	0.0	0.2	46,568.5	0.4
Auxiliary						
Supply Fans	416,647.3	0.0	0.0	18.4	4,266,477.5	36.4
Circulation Pumps	158,049.8	0.0	0.0	7.0	1,618,433.7	13.8
Base Utilities	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	574,697.1	0.0	0.0	25.4	5,884,911.5	50.2
Lighting	729,764.0	0.0	0.0	32.2	7,472,800.5	62.2
Receptacle	439,233.8	0.0	0.0	19.4	4,497,765.0	37.4
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration	0.0	0.0	0.0	0.0	0.0	0.0
Totals	2,050,905.1	732,370.8	5.3	100.0	21,772,232.0	183.2
^R						

V 600 PAGE MONTHLY ENERGY CONSUMPTION - ALTERNATIVE 1 BLDG G101, ECO #7

MONTHLY	ENERGY	CONSUMPTION

Month	ELEC On Peak (kWh)	DEMAND On Peak (kW)	GAS On Peak (Therm)	WATER (1000 Gl)	GAS DMND On Peak (Thrm/hr)
Jan	131,091	392	1,021	1	13
Feb	118,424	392	905	1	14
March	134,239	388	246	0	11
April	123,129	361	18	0	4
May	188,817	613	0	0	0
June	211,427	679	0	0	0
July	206,155	667	0	O	0
Aug	216,005	670	0	0	0
Sept	186,013	633	0	0	0
Oct	167,093	540	0	0	0
Nov	123,582	388	119	0	8
Dec	127,646	392	595	1	13
Total	1,933,622	679	2,904	3	14

Building Energy Consumption = 57,328 (Btu/Sq Ft/Year)
Source Energy Consumption = 167,297 (Btu/Sq Ft/Year)

120,182 (Sq Ft) Floor Area =

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EQUIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1 BLDG G101, ECO #7

------ EQUIPMENT ENERGY CONSUMPTION -----

lef	Equip						thly Con	_						
lum	Code	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
0	LIGHTS													
	ELEC	61547	55625	63698	59214	62622	61366	60471	63698	59214	62622	59214	60471	729,764
	PK	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1
1	MISC LD													
	ELEC	36778	33261	39395	35169	38086	37787	35469	39395	35169	38086	35169	35469	439,234
	PK	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6
2	MISC LD													
	GAS	0	0	0	0	0	0	0	0	0	0	0	0	C
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MISC LD													
	OIL	0	0	0	0	0	0	0	0	0	0	0	0	C
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	MISC LD											_		
	P STEAM	0	0	0	0	0	0	0	0	0	0	0	0	(
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	MISC LD		_			_	_		•		•	0	•	(
	Р НОТН2О	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0 0.0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
6	MISC LD P CHILL	0	0	0	0	0	0	0	0	0	0	0	0	Ċ
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	EQ1121S		ATR	-CLD REC	IP 20-35	TONS								
_	ELEC	0	0	0	0	5199	9152	8961	9099	6179	1914	0	0	40,504
	PK	0.0	0.0	0.0	0.0	33.1	40.4	38.9	39.0	32.8	19.2	0.0	0.0	40.4
1	EQ5200		CONI	DENSER FA	ANS									
	ELEC	0	0	0	0	626	1158	1141	1149	760	183	0	0	5,018
	PK	0.0	0.0	0.0	0.0	3.7	4.5	4.4	4.4	3.9	2.7	0.0	0.0	4.5
1	EQ5001		CHI	LLED WAT	ER PUMP	c.v.								
	ELEC	0	0	0	0	4008	5256	5431	5431	4599	1569	0	0	26,295
	PK	0.0	0.0	0.0	0.0	7.3	7.3	7.3	7.3	7.3	7.3	0.0	0.0	7.3
1	EQ5313			TROLS								_		
	ELEC	0	0	0	0	165	216	223	223	189	65	0	0	1,08
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.
2	EQ1120S	_		-CLD REC				5085	5045	2525		_		n
	ELEC	0	0	0	0	3235	5140	5076	5242	3688	1702	0	0	24,084
	PK	0.0	0.0	0.0	0.0	18.8	22.4	22.0	22.2	19.0	12.0	0.0	0.0	22.4

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2	EQ5200		CONT	ENSER F	ans									
	ELEC	0	0	0	0	387	647	642	657	452	159	0	0	2,943
	PK	0.0	0.0	0.0	0.0	2.1	2.5	2.5	2.5	2.2	1.7	0.0	0.0	2.5
2	EQ5001		CHII	LED WAT	ER PUMP C	.v.								
	ELEC	0	0	0	0	1569	1656	1711	1711	1656	658	0	0	8,961
	PK	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3	0.0	0.0	2.3
2	EQ5313		CONT	TROLS										
	ELEC	0	0	0	0	205	216	223	223	216	86	0	0	1,169
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
3	E01171L		AIR-	-CLD CON	D COMP 35	-60 TON	S							
-	ELEC	0	0	0	0	5299	8166	7390	7967	5414	2056	0	0	36,291
	PK	0.0	0.0	0.0	0.0	39.7	43.0	41.6	41.6	37.0	24.4	0.0	0.0	43.0
3	E05200		CON	DENSER F	ANS									
-	ELEC	0	0	0	0	568	989	908	954	610	190	0	0	4,219
	PK	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	4.5	3.2	0.0	0.0	5.0
3	EQ5313		CON	TROLS										
_	ELEC	0	0	0	0	79	79	72	83	72	52	0	0	437
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
4	EQ1122L		AIR	-CLD REC	IP >55 TG	ONS								
	ELEC	0	0	0	0	18952	31453	29399	30591	21259	11751	0	0	143,406
	PK	0.0	0.0	0.0	0.0	110.0	150.8	142.5	145.0	125.2	73.9	0.0	0.0	150.8
4	EQ5200		CON	DENSER F	ANS									
	ELEC	0	0	0	0	2117	3821	3617	3739	2489	963	0	0	16,746
	PK	0.0	0.0	0.0	0.0	13.6	17.5	17.1	17.3	15.2	10.2	0.0	0.0	17.5
4	EQ5001		CHI	LLED WAT	ER PUMP	c.v.								
	ELEC	0	0	0	0	15698	15192	15698	15698	15192	15044	0	0	92,524
	PK	0.0	0.0	0.0	0.0	21.1	21.1	21.1	21.1	21.1	21.1	0.0	0.0	21.1
4	EQ5313		CON	TROLS										
	ELEC	0	0	0	0	223	216	223	223	216	214	0	0	1,315
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
1	E04003		FC	CENTRIF.	FAN C.V									
	ELEC	16899	15264	16899	16354	16899	16354	16899	16899	16354	16899	16354	16899	198,974
	PK	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
2	EQ4003		FC	CENTRIF.	FAN C.V									
	ELEC	609	551	667	580	638	638	580	667	580	638	580	580	7,303
	PK	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
3	EQ4371		FAN	COIL SU	PPLY FAN									
	ELEC	2658	2401	2658	2572	2658	2572	2658	2658	2572	2658	2572	2658	31,294
	PK	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
4	EQ4371		FAN	COIL SU	PPLY FAN									

Trane Air Conditioning Economics
By: Trane Customer Direct Service Network

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EQUIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1

BLDG	G101, ECO #	7												
	ELEC	2335	2113	2558	2224	2447	2447	2224	2558	2224	2447	2224	2224	28,024
	PK	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
5	EQ4003		FC C	ENTRIF.	FAN C.V.									
	ELEC	7138	6447	7138	6908	7138	6908	7138	7138	6908	7138	6908	7138	84,042
	PK	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
1	EQ2001		GAS	FIRE TUE	E HOT W									
	GAS	477	444	157	18	0	0	0	0	0	0	69	315	1,481
	PK	, 9.0	8.4	7.3	4.4	0.0	0.0	0.0	0.0	0.0	0.0	7.3	7.3	9.0
1	EQ5020		HEAT	WATER O	CIRC. PUN	np c.v.								
	ELEC	1583	1393	739	84	0	0	0	0	0	0	253	1034	5,085
	PK	21.1	21.1	21.1	21.1	0.0	0.0	0.0	0.0	0.0	0.0	21.1	21.1	21.1
1	EQ5240		BOII	LER FORCE	D DRAFT	FAN								
_	ELEC	394	347	184	21	0	0	0	0	0	0	63	257	1,265
	PK	5.3	5.3	5.3	5.3	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	5.3
1	EQ5307		BOII	LER CONTI	ROLS									
_	ELEC	38	33	18	2	0	0	0	0	0	0	6	25	120
	PK	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
2	EQ2002		GAS	FIRE TU	BE STEAM									
	GAS	544	461	88	0	0	0	0	0	0	0	49	280	1,423
	PK	5.8	5.9	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	5.2	5.9
2	EQ5020		HEAT	r water o	CIRC. PU	Æ C.V.								
	ELEC	750	667	193	0	0	0	0	0	0	0	161	600	2,371
	PK	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2
2	EQ5240		BOII	LER FORCE	ED DRAFT	FAN								
	ELEC	192	171	50	0	0	0	0	0	0	0	41	154	608
	PK	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6
2	EQ5307			LER CONTI										
	ELEC	163	145	42	0	0	0	0	0	0	0	35	131	516
	PK	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
2	EQ5061			DENSATE 1								-	_	
	ELEC	9	8	2	0	0	0	0	0	0	0	2	7	29
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	EQ5406			E-UP WATE							_	_	_	_
	WATER	1	1	0	0	0	0	0	0	0	0	0	1	3
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UTILITY PEAK CHECKSUMS - ALTERNATIVE 1 BLDG G101, ECO #7

-----UTILITY PEAK CHECKSUMS-----

Utility ELECTRIC DEMAND

Peak Value 679.2 (kW)
Yearly Time of Peak 15 (hr) 6 (mo)

Hour 15 Month 6

Eqp.			Utility	Percnt
Ref.	Equipment		Demand	Of Tot
Num.	Code Name	Equipment Description	(kW)	(%)
Cooling E	quipment			
1	EQ1121S	AIR-CLD RECIP 20-35 TONS	52.4	
2	EQ1120S	AIR-CLD RECIP <20 TONS	27.5	
3		AIR-CLD COND COMP 35-60 TONS	48.3	
4		AIR-CLD RECIP >55 TONS	189.7	27.93
Sub Total			317.9	46.81
Sub Total			0.0	0.00
Air Movin	g Equipment			
1		SUMMATION OF FAN ELECTRICAL DEMAND	22.7	3.34
2		SUMMATION OF FAN ELECTRICAL DEMAND	2.4	0.36
3		SUMMATION OF FAN ELECTRICAL DEMAND	3.6	0.53
4		SUMMATION OF FAN ELECTRICAL DEMAND	9.3	
5		SUMMATION OF FAN ELECTRICAL DEMAND	9.6	1.41
Sub Total			47.6	7.00
Sub Total			0.0	0.00
Miscellan	eous			
Lights			166.1	24.46
Base Uti	lities		0.0	
Misc Equ	ipment		147.6	
Sub Total			313.7	46.19
Grand Tot	al		679.2	100.00

CALIFORNIA TITLE 24 COMPLIANCE - ALTERNATIVE 1

BLDG G101, ECO #7

------ CALIFORNIA TITLE 24 COMPLIANCE REPORT

----- E N E R G Y U S E S U M M A R Y

	ELEC (kWh/yr)	GAS (kBtu/yr)	WATER (1000 gal)	PERCENT OF TOTAL ENERGY (%)	TOTAL SOURCE ENERGY (kBtu/yr)	ADJUSTED UNIT SOURCE ENERGY (kBtu/yr-sf)
Primary Heating	2,537.7	290,369.6	3.1	4.3	331,638.3	2.8
Primary Cooling						
Compressor	244,284.7	0.0	0.0	12.1	2,501,481.0	21.3
Tower/Cond Fans	28,926.5	0.0	0.0	1.4	296,208.3	2.5
Condenser Pump	0.0	0.0	0.0	0.0	0.0	0.0
Other Accessories	4,002.0	0.0	0.0	0.2	40,980.6	0.3
Auxiliary						
Supply Fans	349,637.5	0.0	0.0	17.3	3,580,296.2	30.5
Circulation Pumps	135,235.4	0.0	0.0	6.7	1,384,813.6	11.8
Base Utilities	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	484,872.9	0.0	0.0	24.0	4,965,109.5	42.3
Lighting	729,764.0	0.0	0.0	36.2	7,472,800.5	62.2
Receptacle	439,233.8	0.0	0.0	21.8	4,497,765.0	37.4
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration	0.0	0.0	0.0	0.0	0.0	.0.0
Totals	1,933,621.6	290,369.6	3.1	100.0	20,105,984.0	169.0

MONTHLY ENERGY CONSUMPTION - ALTERNATIVE 1 BLDG G101, ECO #12

Month	ELEC On Peak (kWh)	DEMAND On Peak (kW)	GAS On Peak (Therm)	WATER (1000 Gl)	GAS DMND On Peak (Thrm/hr)
Jan	130,442	392	822	1	12
Feb	118,332	392	743	1	13
March	133,540	388	130	0	8
April	123,021	361	0	0	0
May	175,694	530	0	0	0
June	194,215	625	0	0	0
July	189,689	610	0	0	0
Aug	197,836	613	0	0	0
Sept	171,863	586	0	0	0
Oct	159,907	489	0	0	0
Nov	123,352	361	73	0	8
Dec	127,415	392	448	1	11
Total	1,845,306	625	2,215	3	13

Building Energy Consumption = 54,247 (Btu/Sq Ft/Year) Source Energy Consumption = 159,169 (Btu/Sq Ft/Year) Floor Area = 120,182 (Sq Ft)

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 E	Q	U	Ι	E) M	1 E	N	Ί	E I	N :	ΕF	₹G	Y	(: 0	N	S	U	M	P	T	Ι	0 1	4 -	· - ·

Ref	T					Mani	thle Con	sumption						
Num	Equip Code	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
0	LIGHTS													
	ELEC PK	615 4 7 166.1	55625 166.1	63698 166.1	59214 166.1	62622 166.1	61366 166.1	60471 166.1	63698 166.1	59214 166.1	62622 166.1	5921 4 166.1	60471 166.1	729,764 166.1
	PK	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1
1	MISC LD							35.460	20205	25160	20005	35150	25.450	420 024
	ELEC PK	36778 147.6	33261 147.6	39395 147.6	35169 147.6	38086 147.6	37787 147.6	35469 147.6	39395 147.6	35169 147.6	38086 147.6	35169 147.6	35469 147.6	439,234 147.6
	PK	14/.0	147.0	147.0	147.0	147.0	147.0	147.0	147.0	147.0	147.0	147.0	147.0	147.0
2	MISC LD			_	_	_		_	_	_	_	_	_	_
	GAS	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MISC LD											_		
	OIL	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	MISC LD												_	_
	P STEAM	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	MISC LD													
	P HOTH20	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
6	MISC LD								_	_		_	_	
	P CHITT	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	EQ1121S			-CLD REC		TONS								
	ELEC	0	0	0	0	4514	8304	8069	8198	5376	1561	0	0	36,022
	PK	0.0	0.0	0.0	0.0	31.7	38.8	37.3	37.4	31.3	18.5	0.0	0.0	38.8
1	_			DENSER FA										
	ELEC	0	0	0	0	550	1052	1029	1038	668	154	0	0	4,491
	PK	0.0	0.0	0.0	0.0	3.5	4.3	4.2	4.3	3.7	2.6	0.0	0.0	4.3
1	EQ5001		CHI	LLED WATE										
	ELEC	0	0	0	0	3876	5256	5431	5431	4088	1212	0	0	25,295
	PK	0.0	0.0	0.0	0.0	7.3	7.3	7.3	7.3	7.3	7.3	0.0	0.0	7.3
1	EQ5313		CON	TROLS										
	ELEC	0	0	0	0	159	216	223	223	168	50	0	0	1,039
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
2	EQ1120S		AIR-	-CLD REC	IP <20 TO	ONS								
	ELEC	0	0	0	0	2916	4767	4683	4847	3328	1555	0	0	22,096
	PK	0.0	0.0	0.0	0.0	18.1	21.7	21.3	21.4	18.4	11.8	0.0	0.0	21.7

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2	EQ5200			DENSER F							_			
	ELEC	0	0	0	0	352	600	592	608	411	147	0	0	2,709
	PK	0.0	0.0	0.0	0.0	2.0	2.4	2.4	2.4	2.2	1.6	0.0	0.0	2.4
2	EQ5001		CHI	LLED WAT	ER PUMP (.v.								
	ELEC	0	0	0	0	1313	1656	1711	1711	1587	596	0	0	8,574
	PK	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3	0.0	0.0	2.3
_														
2	EQ5313			TROLS 0	0	171	216	223	223	207	78	0	0	1,118
	ELEC	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.5	0.0	0.0	0.5
3	EQ1171L		AIR	-CLD CON	D COMP 35	-60 TON	S							
_	ELEC	0	0	0	0	1031	3280	2548	2697	1315	0	0	0	10,871
	PK	0.0	0.0	0.0	0.0	14.9	29.4	27.2	27.2	24.8	15.8	0.0	0.0	29.4
_	T05000		COM	DENSER F	a N.C									
3	EQ5200 ELEC	0	O CON	DENSER F. O	0	136	407	324	340	169	0	0	0	1,375
	PK	0.0	0.0	0.0	0.0	1.9	3.4	3.3	3.3	3.0	2.1	0.0	0.0	3.4
	FR	0.0	0.0	0.0	0.0	1.3	3.4	3.3	5.5	3.0				
3	EQ5313		CON	TROLS										
	ELEC	0	0	0	0	27	69	56	63	34	0	0	0	248
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
4	EQ1122L		a TD	-CID PEC	IP >55 TO	n c								
*	ELEC	0	0	-CHD REC	0 10	12857	22253	20909	20999	14440	8784	0	0	100,241
	PK	0.0	0.0	0.0	0.0	77.9	118.8	108.8	111.0	97.9	39.5	0.0	0.0	118.8
4	EQ5200			DENSER F								_	_	
	ELEC	0	0	0	0	1382	2661	2531	2525	1642	689	0	0	11,430
	PK	0.0	0.0	0.0	0.0	9.7	13.6	13.0	13.2	11.9	5.3	0.0	0.0	13.6
4	EQ5001		CHI	LLED WAT	ER PUMP	c.v.								
	ELEC	0	0	0	0	15698	15192	15698	15698	15192	14390	0	0	91,869
	PK	0.0	0.0	0.0	0.0	21.1	21.1	21.1	21.1	21.1	21.1	0.0	0.0	21.1
4	EQ5313		CON	TROLS										
•	ELEC	0	0	0	0	223	216	223	223	216	205	0	0	1,306
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
1	EQ4003		FC	CENTRIF.	FAN C.V	•								
	ELEC	16899	15264	16899	16354	16899	16354	16899	16899	16354	16899	16354	16899	198,974
	PK	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
2	EQ4003		FC	CENTRIF.	FAN C.V									
_	ELEC	609	551	667	580	638	638	580	667	580	638	580	580	7,303
	PK	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
_					nn-11									
3	EQ4371	0.050			PPLY FAN	2658	2572	2658	2658	2572	2658	2572	2658	31,294
	ELEC PK	2658 3.6	2401 3.6	2658 3.6	2572 3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	31,294
	r n	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
4	EQ4371		FAN	COIL SU	PPLY FAN									

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BUDG	GIOI, ECO 1	# 12												
	ELEC	2335	2113	2558	2224	2447	2447	2224	2558	2224	2447	2224	2224	28,024
	PK	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
5	EQ4003		FC C	CENTRIF.	FAN C.V.									
	ELEC	7138	6447	7138	6908	7138	6908	7138	7138	6908	7138	6908	7138	84,042
	PK	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
1	EQ2001		GAS	FIRE TU	BE HOT WA	TER								
	GAS	380	373	83	0	0	0	0	0	0	0	56	244	1,137
	PK	8.4	7.3	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	7.0	8.4
1	EQ5020		HEAT	WATER	CIRC. PUN	æc.v.								
	ELEC	1139	1393	253	0	0	0	0	0	0	0	169	971	3,925
	PK	21.1	21.1	21.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.1	21.1	21.1
1	EQ5240		BOII	LER FORC	ED DRAFT	FAN								
	ELEC	283	347	63	0	0	0	0	0	0	0	42	242	976
	PK	5.3	5.3	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	5.3
1	EQ5307		BOII	LER CONT	ROLS									
	ELEC	27	33	6	0	0	0	0	0	0	0	4	23	93
	PK	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
2	EQ2002			FIRE TU							_			
	GAS	441	370	47	0	0	0	0	0	0	0	17	203	1,078
	PK	5.4	5.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	4.4	5.5
2	EQ5020				CIRC. PUN		_	_				70	400	0.013
	ELEC	692	605	138	0	0	0	0	0	0	0	78	499	2,013
	PK	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2
2	EQ5240			LER FORC			_		_	_	_		400	F16
	ELEC	177	155	35	0	0	0	0	0	0	0	20	128	516
	PK	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6
2	EQ5307			LER CONT			_	_	_	_			100	430
	ELEC	150	132	30	0	0	0	0	0	0	0	17 0.5	108 0.5	438
	PK	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
2	EQ5061				RETURN PU		-	-	-	_	_		_	9.4
	ELEC	8	7	2	0	0	0	0	0	0	0	1	6	24
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	EQ5406			E-UP WAT		_	-	-	_	_	_	•	•	•
	WATER	1	1	0	0	0	0	0	0	0	0	0	1	3 0.0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

UTILITY PEAK CHECKSUMS - ALTERNATIVE 1 BLDG G101, ECO #12

Utility ELECTRIC DEMAND

Peak Value 625.0 (kW) Yearly Time of Peak 15 (hr) 6 (mo)

Hour 15 Month 6

Eqp. Ref. Num.	Equipment Code Name	Equipment Description	Utility Demand (kW)	
Cooling E	quipment			
1 2		AIR-CLD RECIP <20 TONS	50.6 26.7 32.6	4.28
3 4		AIR-CLD COND COMP 35-60 TONS AIR-CLD RECIP >55 TONS	153.8	
Sub Total			263.8	42.20
Sub Total			0.0	0.00
Air Moving	g Equipment			
1		SUMMATION OF FAN ELECTRICAL DEMAND	22.7	
2		SUMMATION OF FAN ELECTRICAL DEMAND	2.4	0.39
3		SUMMATION OF FAN ELECTRICAL DEMAND	3.6	-
4		SUMMATION OF FAN ELECTRICAL DEMAND	9.3	
5		SUMMATION OF FAN ELECTRICAL DEMAND	9.6	1.53
Sub Total			47.6	7.61
Sub Total			0.0	0.00
Miscellane	eous			
Lights			166.1	26.58
Base Util			0.0	
Misc Equi	ipment		147.6	
Sub Total			313.7	50.19
Grand Tota	al		625.0	100.00

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CALIFORNIA TITLE 24 COMPLIANCE - ALTERNATIVE 1

BLDG G101, ECO #12

-----ENERGY USE SUMMARY

ELEC (kWh/yr)	GAS (kBtu/yr)	WATER (1000 gal)	PERCENT OF TOTAL ENERGY (%)	TOTAL SOURCE ENERGY (kBtu/yr)	ADJUSTED UNIT SOURCE ENERGY (kBtu/yr-sf)
2,047.1	221,515.1	2.7	3.5	254,136.7	2.2
169,230.7	0.0	0.0	8.9	1,732,926.5	14.8
20,005.4	0.0	0.0	1.0	204,855.4	1.7
0.0	0.0	0.0	0.0	0.0	0.0
3,712.2	0.0	0.0	0.2	38,013.0	0.3
349,637.5	0.0	0.0	18.3	3,580,296.2	30.5
131,675.5	0.0	0.0	6.9	1,348,360.3	11.5
0.0	0.0	0.0	0.0	0.0	0.0
481,313.0	0.0	0.0	25.2	4,928,656.5	42.0
729,764.0	0.0	0.0	38.2	7,472,800.5	62.2
439,233.8	0.0	0.0	23.0	4,497,765.0	37.4
0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0
1,845,306.4	221,515.1	2.7	100.0	19,129,154.0	160.7
	(kWh/yr) 2,047.1 169,230.7 20,005.4 0.0 3,712.2 349,637.5 131,675.5 0.0 481,313.0 729,764.0 439,233.8 0.0 0.0	(kWh/yr) (kBtu/yr) 2,047.1 221,515.1 169,230.7 0.0 20,005.4 0.0 0.0 0.0 3,712.2 0.0 349,637.5 0.0 131,675.5 0.0 0.0 0.0 481,313.0 0.0 729,764.0 0.0 439,233.8 0.0 0.0 0.0	(kWh/yr) (kBtu/yr) (1000 gal) 2,047.1 221,515.1 2.7 169,230.7 0.0 0.0 20,005.4 0.0 0.0 0.0 0.0 0.0 3,712.2 0.0 0.0 349,637.5 0.0 0.0 0.0 0.0 0.0 481,313.0 0.0 0.0 729,764.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	ELEC (kWh/yr) (kBtu/yr) (1000 gal) (%) 2,047.1 221,515.1 2.7 3.5 169,230.7 0.0 0.0 8.9 20,005.4 0.0 0.0 1.0 0.0 0.0 0.0 0.0 3,712.2 0.0 0.0 0.0 0.2 349,637.5 0.0 0.0 0.0 18.3 131,675.5 0.0 0.0 0.0 6.9 0.0 0.0 0.0 0.0 0.0 0.0 481,313.0 0.0 0.0 0.0 25.2 729,764.0 0.0 0.0 0.0 38.2 439,233.8 0.0 0.0 0.0 23.0 0.0 0.0 0.0 0.0 0.0	ELEC GAS WATER ENERGY ENERGY (kWh/yr) (kBtu/yr) (1000 gal) (%) (kBtu/yr) 2,047.1 221,515.1 2.7 3.5 254,136.7 169,230.7 0.0 0.0 8.9 1,732,926.5 20,005.4 0.0 0.0 1.0 204,855.4 0.0 0.0 0.0 0.0 0.0 0.0 3,712.2 0.0 0.0 0.0 0.2 38,013.0 349,637.5 0.0 0.0 18.3 3,580,296.2 131,675.5 0.0 0.0 6.9 1,348,360.3 0.0 0.0 0.0 0.0 6.9 1,348,360.3 0.0 0.0 0.0 0.0 25.2 4,928,656.5 729,764.0 0.0 0.0 38.2 7,472,800.5 439,233.8 0.0 0.0 38.2 7,472,800.5 439,233.8 0.0 0.0 23.0 4,497,765.0 0.0 0.0 0.0 0.0 0.0 0.0

MONTHLY ENERGY CONSUMPTION - ALTERNATIVE 1

BLDG G101, ECO #13

------ MONTHLY ENERGY CONSUMPTION -----

Month	ELEC On Peak (kWh)	DEMAND On Peak (kW)	GAS On Peak (Therm)	WATER (1000 Gl)	GAS DMND On Peak (Thrm/hr)
Jan	149,276	361	2,067	1	10
Feb	136,359	361	2,007	1	9
March	147,508	361	521	1	6
April	132,896	361	10	0	2
May	200,914	561	0	0	0
June	225,132	630	0	0	0
July	221,997	623	0	0	0
Aug	230,656	621	0	0	0
Sept	199,198	594	0	0	0
Oct	175,731	512	0	0	0
Nov	135,975	361	319	0	5
Dec	144,562	361	1,413	1	7
Total	2,100,206	630	6,336	5	10

Building Energy Consumption = 64,915 (Btu/Sq Ft/Year)
Source Energy Consumption = 184,497 (Btu/Sq Ft/Year)

Floor Area = 120,182 (Sq Ft)

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EQUIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1 BLDG G101, ECO #13

------ EQUIPMENT ENERGY CONSUMPTION ------

Ref	Equip -					Mon	_	sumption						
Num	Code	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
0	LIGHTS										50500	50014	CO 474	700 754
	ELEC	61547	55625	63698	59214	62622	61366	60471	63698	59214	62622	59214	60471	729,764
	PK	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1	166.1
1	MISC LD										22225	25160	25.450	420 224
	ELEC	36778	33261	39395	35169	38086	37787	35469	39395	35169	38086	35169	35469	439,234
	PK	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6
2	MISC LD													
	GAS	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MISC LD										_	_	_	
	OIL	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4				_			_		•	•	0	0	0	0
	P STEAM	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	MISC LD	_		_	0	0	0	0	0	0	0	0	0	.O
	P HOTH20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		•		
6	MISC LD P CHILL	0	0	0	0	0	0	0	0	0	0	0	0	0
	P CRILL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		•												
1	-	_		-CLD REC			0150	8961	9099	6179	1914	0	0	40,504
	ELEC	0	0.0	0.0	0.0	5199 33.1	9152 40.4	38.9	39.0	32.8	19.2	0.0	0.0	40.4
	PK	0.0	0.0	0.0	0.0	33.1	40.4	30.9	39.0	32.0	13.2	0.0	0.0	40.4
1	EQ5200			DENSER F								•	_	E 010
	ELEC	0	0	0	0	626	1158	1141	1149	760	183	0	0	5,018
	PK	0.0	0.0	0.0	0.0	3.7	4.5	4.4	4.4	3.9	2.7	0.0	0.0	4.5
1	EQ5001			LLED WAT						4500	1555	_	•	26 205
	ELEC	0	0	0	0	4008	5256	5431	5431	4599	1569	0	0	26,295 7.3
	PK	0.0	0.0	0.0	0.0	7.3	7.3	7.3	7.3	7.3	7.3	0.0	0.0	7.3
1	EQ5313			TROLS	_					100		•	•	1,081
	ELEC	0	0	0	0	165	216	223	223	189	65	0	0.0	0.3
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
2	EQ1120S			-CLD REC			F- 1-	F 6 7 6	5045	2505	1700	•	^	24 004
	ELEC	0	0	0	0	3235	5140	5076	5242	3688	1702	0	0 0.0	24,084 22.4
	PK	0.0	0.0	0.0	0.0	18.8	22.4	22.0	22.2	19.0	12.0	0.0	0.0	44.4

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2	EQ5200	_		ENSER FA			647	642	657	452	159	0	0	2 242
	ELEC	0	0	0	0	387	647		2.5	2.2	1.7	0.0	_	2,943
	PK	0.0	0.0	0.0	0.0	2.1	2.5	2.5	2.5	2.2	1.7	0.0	0.0	2.5
2	EQ5001		CHIL	LED WATE										
	ELEC	0	0	0	0	1569	1656	1711	1711	1656	658	0	0	8,961
	PK	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3	0.0	0.0	2.3
2	EQ5313		CONT	ROLS										
	ELEC	0	0	0	0	205	216	223	223	216	86	0	0	1,169
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
3	EQ1171L		ATR-	CLD COND	COMP 35	5-60 TON	3						•	
,	ELEC	0	0	0	0	6062	10762	10633	10668	7088	1862	0	0	47,075
	PK	0.0	0.0	0.0	0.0	35.2	43.0	41.6	41.6	37.0	24.4	0.0	0.0	43.0
	FK	0.0	0.0	0.0	0.0	33.2	45.0	4110	41.0	2				
3	EQ5200	_		ENSER FA			1245		1226	075	180	o	0	5,816
	ELEC	0	0	0	0	731	1346	1348	1336	875				•
	PK	0.0	0.0	0.0	0.0	4.2	5.0	5.0	5.0	4.5	3.2	0.0	0.0	5.0
3	EQ5313		CONT	ROLS										
	ELEC	0	0	0	0	163	216	223	223	180	61	0	0	1,067
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
4	EQ1122L		AIR-	CLD RECI	P >55 T	ons								
	ELEC	0	0	0	0	13280	22661	21930	22064	14941	7059	0	0	101,935
	PK	0.0	0.0	0.0	0.0	115.8	122.5	116.8	117.0	104.2	61.8	0.0	0.0	122.5
4	EQ5200		COND	ENSER FA	NS									
•	ELEC	0	0	0	0	1374	2728	2649	2628	1650	524	0	0	11,552
	PK	0.0	0.0	0.0	0.0	14.0	14.5	14.4	14.4	13.1	7.6	0.0	0.0	14.5
4	EQ5001		CHIT	LED WATE	משתום ם	C 17								
4	ELEC	0	0	O WATE	0	13082	12660	13082	13082	12660	11774	0	0	76,340
	PK	0.0	0.0	0.0	0.0	21.1	21.1	21.1	21.1	21.1	21.1	0.0	0.0	21.1
		0.0	0.0	0.0	•••									
4	EQ5313			ROLS										
	ELEC	0	0	0	0	186	180	186	186	180	167	0	0	1,085
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
5	EQ1750		AIR-	CLD CTV	ICE-CHI	LL H2O								
	ELEC	4039	3724	4123	3990	14237	17436	16896	17936	14951	11362	3911	4123	116,729
	PK	59.6	59.6	59.6	59.6	140.2	145.5	144.8	144.4	140.2	140.2	140.2	59.6	145.5
5	EQ5205		CONT	ENSER FA	NS									
•	ELEC	10	9	10	10	14	14	14	15	14	12	10	10	142
	PK	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	EQ5001		רדער	LED WATE	מאתום כד	C V								
J	ELEC	0	0	0 Men #wre	0	0.4.	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	~ • ·	•••			2.5								-	
5	EQ5309		CONT	ROLS										

V 600 PAGE

впра	GIOI, ECO	113												
	ELEC	124	112	124	120	297	292	299	302	291	300	120	124	2,505
	PK	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1	EQ4003				FAN C.V.									
	ELEC	16899	15264	16899	16354	16899	16354	16899	16899	16354	16899	16354	16899	198,974
	PK	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
2	EQ4003				FAN C.V.		4.500	1707	1707	1739	1797	1739	1797	21,155
	ELEC	1797	1623	1797	1739	1797	1739	1797 2.4	1797 2.4	2.4	2.4	2.4	2.4	21,155
	PK	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	4.4	2.4
3	EQ4371				JPPLY FAN	0.550	2572	2658	2658	2572	2658	2572	2658	31,294
	ELEC	2658	2401	2658	2572 3.6	2658 3.6	2572 3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	PK	3.6	3.6	3.6	3.6	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
4	EQ4371				JPPLY FAN				5005	6670	5005	6672	COOE	81,182
	ELEC	6895	6228	6895	6672	6895	6672	6895	6895	6672	6895	9.3	6895 9.3	9.3
	PK	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
5	EQ4003				FAN C.V.									24.242
	ELEC	7138	6447	7138	6908	7138	6908	7138	7138	6908	7138	6908	7138	84,042
	PK	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
1	EQ2001				JBE HOT WA									
	gas	890	940	266	6	0	0	0	0	0	0	184	689	2,974
	PK	5.7	4.0	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	2.6	3.3	5.7
1	EQ5020				CIRC. PUM					_	_			
	ELEC	7744	7976	3186	84	0	0	0	0	0	0	2194	5971	27,156
	PK	21.1	21.1	21.1	21.1	0.0	0.0	0.0	0.0	0.0	0.0	21.1	21.1	21.1
1	EQ5240				CED DRAFT		_	_	_	_		- 4 -	1405	6.757
	ELEC	1927	1985	793	21	0	0	0	0	0	0	546	1486 5.3	6,757 5.3
	PK	5.3	5.3	5.3	5.3	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	5.3
1	EQ5307			LER CONT					_	_	_		4.45	
	ELEC	183	189	76	2	0	0	0	0	0	0.0	52 0.5	142 0.5	644 0.5
	PK	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
2	EQ2002				JBE STEAM			_	_	_	_			2 250
	GAS	1177	1067	254	4	0	0	0	0	0	0	134 2.8	724 4.5	3,362 5.5
	PK	5.4	5.5	3.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	2.8	4.5	5.5
2	EQ5020				CIRC. PUM					_	_			
	ELEC	1035	1021	483	28	0	0	0	0	0	0	345	929	3,841 2.3
	PK	2.3	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3
2	EQ5240				CED DRAFT			_	_	_	_		000	00"
	ELEC	265	262	124	7	0	0	0	0	0	0	88	238	985 0.6
	PK	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.0
2	EQ5307			LER CON						-	_		000	035
	ELEC	225	222	105	6	0	0	0	0	0	0	75 0.5	202 0.5	835 0.5
	PK	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	V.5	0.5

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2	EQ5061		COND	ENSATE R	ETURN PU	MP								
	ELEC	12	12	6	0	0	0	0	0	0	0	4	11	46
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	EQ5406		MAKE	-UP WATE	R									
	WATER	1	1	1	0	0	0	0	0	0	0	0	1	5
	DK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



UTILITY PEAK CHECKSUMS - ALTERNATIVE 1 BLDG G101, ECO #13

-----UTILITY PEAK CHECKSUMS-----

Utility ELECTRIC DEMAND

Peak Value 630.4 (kW)
Yearly Time of Peak 12 (hr) 6 (mo)

Hour 12 Month 6

Eqp. Ref. Num.	Equipment Code Name	Equipment Description	Utility Demand (kW)	
Cooling E	quipment			
1 2 3 4	EQ1120S EQ1171L	AIR-CLD RECIP 20-35 TONS AIR-CLD RECIP <20 TONS AIR-CLD COMD COMP 35-60 TONS AIR-CLD RECIP >55 TONS	44.3 24.7 41.6 158.4	3.92 6.60
Sub Total			269.1	42.69
Sub Total			0.0	0.00
Air Movin	g Equipment			
1 2 3 4 5		SUMMATION OF FAN ELECTRICAL DEMAND SUMMATION OF FAN ELECTRICAL DEMAND SUMMATION OF FAN ELECTRICAL DEMAND SUMMATION OF FAN ELECTRICAL DEMAND SUMMATION OF FAN ELECTRICAL DEMAND	22.7 2.4 3.6 9.3 9.6	0.38 0.57
Sub Total			47.6	7.55
Sub Total			0.0	0.00
Miscellan	eous			
Lights Base Uti Misc Equ Sub Total	ipment			23.41 49.77
Grand Total	al		630.4	100.00

---- BUILDING COOLING DEMANDS AND THERMAL STORAGE----

January

	Desi	lgn	Cooling	Chiller	Chiller	Storage
	OADB	OAWB	Load	Load	Demand	Capacity
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)
1	42.7	35.4	0.0	0.0	0.0	743
2	41.8	34.7	0.0	14.9	24.5	751
3	41.1	34.4	0.0	0.0	0.0	743
4	40.6	34.0	0.0	14.9	24.5	751
5	40.4	34.0	0.0	0.0	0.0	743
6	40.8	34.4	0.0	14.9	24.5	751
7	41.6	35.0	0.0	0.0	0.0	743
8	43.2	36.5	0.0	14.9	24.5	751
9	45.5	38.5	0.0	0.0	0.0	751
10	48.1	40.4	0.0	0.0	0.0	751
11	51.0	42.2	0.0	0.0	0.0	751
12	53.8	43.8	0.0	0.0	0.0	751
13	55.9	45.0	0.0	0.0	0.0	743
14	57.3	45.5	0.0	0.0	0.0	736
15	57.8	45.6	0.0	0.0	0.0	729
16	57.3	44.8	0.0	0.0	0.0	721
17	56.1	43.9	0.0	0.0	0.0	721
18	54.2	42.7	0.0	0.0	0.0	721
19	51.9	41.6	0.0	0.0	0.0	721
20	49.6	40.2	0.0	0.0	0.0	721
21	47.7	39.1	0.0	0.0	0.0	721
22	46.0	37.9	0.0	0.0	0.0	721
23	44.6	36.8	0.0	0.0	0.0	721
24	43.6	36.1	0.0	0.0	0.0	721

				We	ekday		Saturday			
	Ty	pical	Cooling	Chiller	Chiller	Storage	Cooling	Chiller	Chiller	Storage
	OADB	OAWB	Load	Load	Demand	Capacity	Load	Load	Demand	Capacity
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)
1	33.4	30.4	0.0	36.8	54.7	751	0.0	43.9	59.6	751
2	32.1	29.3	0.0	0.0	0.0	743	0.0	0.0	0.0	743
3	31.7	29.3	0.0	14.9	24.5	751	0.0	14.9	24.5	751
4	31.9	29.5	0.0	0.0	0.0	743	0.0	0.0	0.0	743
5	32.6	30.3	0.0	14.9	24.5	751	0.0	14.9	24.5	751
6	33.6	31.3	0.0	0.0	0.0	743	0.0	0.0	0.0	743
7	35.0	32.6	0.0	14.9	24.5	751	0.0	14.9	24.5	751
8	36.6	34.4	0.0	0.0	0.0	743	0.0	0.0	0.0	743
9	38.5	36.3	0.0	0.0	0.0	743	0.0	0.0	0.0	743
10	40.4	37.7	0.0	0.0	0.0	743	0.0	0.0	0.0	743
11	42.3	38.7	0.0	0.0	0.0	743	0.0	0.0	0.0	743
12	44.2	39.6	0.0	0.0	0.0	743	0.0	0.0	0.0	743
13	45.8	40.5	0.0	0.0	0.0	736	0.0	0.0	0.0	736
14	47.2	41.1	0.0	0.0	0.0	729	0.0	0.0	0.0	729
15	48.2	41.6	0.0	0.0	0.0	721	0.0	0.0	0.0	721

Trane Air Conditioning Economics By: Trane Customer Direct Service Network

V 600 PAGE COLD THERMAL STORAGE - ALTERNATIVE 1

BLDG G101, ECO #13

			Weekday			Saturday				
	(The se	pical			Chiller					
	OADB	OAWB	Load	Load			Load	Load		
Hour	(F)	(F)	(Ton)	(Ton)		(Ton-Hr)		(Ton)		(Ton-Hr)
нош	(1)	(2)	(1011)	(1011)	(1.11)	(IOII-III)	(1011)	(1011)	(~ ,	(1011 111)
16	48.9	41.8	0.0	0.0	0.0	714	0.0	0.0	0.0	714
17	49.1	41.9	0.0	0.0	0.0	714	0.0	0.0	0.0	714
18	48.7	41.9	0.0	0.0	0.0	714	0.0	0.0	0.0	714
19	47.4	41.7	0.0	0.0	0.0	714	0.0	0.0	0.0	714
20	45.5	40.5	0.0	0.0	0.0	714	0.0	0.0	0.0	714
21	43.1	38.9	0.0	0.0	0.0	714	0.0	0.0	0.0	714
22	40.4	36.7	0.0	0.0	0.0	714	0.0	0.0	0.0	714
23	37.7	34.3	0.0	0.0	0.0	714	0.0	0.0	0.0	714
24	35.3	32.3	0.0	0.0	0.0	714	0.0	0.0	0.0	714
				S	under			M	onday	
	Ty	pical			•	Storage			Chiller	
	OADB	OAWB	Load	Load	Demand	Capacity	Load	Load	Demand	Capacity
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)
	22.4	30.4	0.0	43.9	59.6	751	0.0	43.9	59.6	751
1	33.4	29.3	0.0	0.0	0.0	743	0.0	0.0	0.0	743
2 3	32.1 31.7	29.3	0.0	14.9	24.5	751	0.0	14.9	24.5	751
4	31.9	29.5	0.0	0.0	0.0	743	0.0	0.0	0.0	743
5	32.6	30.3	0.0	14.9	24.5	751	0.0	14.9	24.5	751
6	33.6	31.3	0.0	0.0	0.0	743	0.0	0.0	0.0	743
7	35.0	32.6	0.0	14.9	24.5	751	0.0	14.9	24.5	751
8	36.6	34.4	0.0	0.0	0.0	743	0.0	0.0	0.0	743
9	38.5	36.3	0.0	0.0	0.0	743	0.0	0.0	0.0	743
10	40.4	37.7	0.0	0.0	0.0	743	0.0	0.0	0.0	743
11	42.3	38.7	0.0	0.0	0.0	743	0.0	0.0	0.0	743
12	44.2	39.6	0.0	0.0	0.0	743	0.0	0.0	0.0	743
13	45.8	40.5	0.0	0.0	0.0	736	0.0	0.0	0.0	736
14	47.2	41.1	0.0	0.0	0.0	729	0.0	0.0	0.0	729
15	48.2	41.6	0.0	0.0	0.0	721	0.0	0.0	0.0	721
16	48.9	41.8	0.0	0.0	0.0	714	0.0	0.0	0.0	714
17	49.1	41.9	0.0	0.0	0.0	714	0.0	0.0	0.0	714
18	48.7	41.9	0.0	0.0	0.0	714	0.0	0.0	0.0	714
19	47.4	41.7		0.0	0.0	714	0.0	0.0	0.0	714
20	45.5	40.5	0.0	0.0	0.0	714	0.0	0.0	0.0	714
21	43.1	38.9	0.0	0.0	0.0	714	0.0	0.0	0.0	714
22	40.4	36.7	0.0	0.0	0.0	714	0.0	0.0	0.0	714
23	37.7	34.3	0.0	0.0	0.0	714	0.0	0.0	0.0	714
24	35.3	32.3	0.0	0.0	0.0	714	0.0	0.0	0.0	714

---- BUILDING COOLING DEMANDS AND THERMAL STORAGE----

February

			Design					
	Desi	lgn	Cooling	Chiller	Chiller	Storage		
	OADB	OAWB	Load	Load	Demand	Capacity		
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)		
1	42.8	35.6	0.0	43.9	59.6	751		
2	42.0	34.9	0.0	0.0	0.0	743		
3	41.4	34.5	0.0	14.9	24.5	751		
4	41.0	34.2	0.0	0.0	0.0	743		
5	40.8	34.0	0.0	14.9	24.5	751		
6	41.1	34.4	0.0	0.0	0.0	743		
7	41.9	35.0	0.0	14.9	24.5	751		
8	43.3	36.5	0.0	0.0	0.0	743		
9	45.3	38.2	0.0	0.0	0.0	743		
10	47.7	39.5	0.0	0.0	0.0	743		
11	50.3	41.3	0.0	0.0	0.0	743		
12	52.8	42.5	0.0	0.0	0.0	743		
13	54.7	43.4	0.0	0.0	0.0	736		
14	55.9	44.0	0.0	0.0	0.0	729		
15	56.4	44.2	0.0	0.0	0.0	721		
16	55.9	43.6	0.0	0.0	0.0	714		
17	54.8	42.6	0.0	0.0	0.0	714		
18	53.1	41.4	0.0	0.0	0.0	714		
19	51.1	40.4	0.0	0.0	0.0	714		
20	49.1	39.4	0.0	0.0	0.0	714		
21	47.4	38.5	0.0	0.0	0.0	714		
22	45.8	37.6	0.0	0.0	0.0	714		
23	44.5	36.9	0.0	0.0	0.0	714		
24	43.6	36.1	0.0	0.0	0.0	714		

				We	ekday		Saturday			
	Typ	pical	Cooling	Chiller	Chiller	Storage	Cooling	Chiller	Chiller	Storage
	OADB	OAWB	Load	Load	Demand	Capacity	Load	Load	Demand	Capacity
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)
1	37.5	34.5	0.0	43.9	59.6	751	0.0	43.9	59.6	751
2	36.0	33.0	0.0	0.0	0.0	743	0.0	0.0	0.0	743
3	34.7	31.8	0.0	14.9	24.5	751	0.0	14.9	24.5	751
4	33.6	30.9	0.0	0.0	0.0	743	0.0	0.0	0.0	743
5	32.8	30.1	0.0	14.9	24.5	751	0.0	14.9	24.5	751
6	32.2	29.8	0.0	0.0	0.0	743	0.0	0.0	0.0	743
7	32.1	29.6	0.0	14.9	24.5	751	0.0	14.9	24.5	751
8	32.5	30.3	0.0	0.0	0.0	743	0.0	0.0	0.0	743
9	33.9	31.6	0.0	0.0	0.0	743	0.0	0.0	0.0	743
10	36.0	33.0	0.0	0.0	0.0	743	0.0	0.0	0.0	743
11	38.5	34.8	0.0	0.0	0.0	743	0.0	0.0	0.0	743
12	41.3	36.5	0.0	0.0	0.0	743	0.0	0.0	0.0	743
13	43.8	38.1	0.0	0.0	0.0	736	0.0	0.0	0.0	736
14	45.9	39.5	0.0	0.0	0.0	729	0.0	0.0	0.0	729
15	47.2	40.4	0.0	0.0	0.0	721	0.0	0.0	0.0	721

				*1-	-1-4		Saturday			
		-41			-					
		pical	_	Chiller		Storage	_	Chiller		Storage
•••	OADB	OAWB	Load	Load	Demand	Capacity	Load	Load	Demand	Capacity
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)
16	47.7	40.6	0.0	0.0	0.0	714	0.0	0.0	0.0	714
17	47.5	40.2	0.0	0.0	0.0	714	0.0	0.0	0.0	714
18	47.0	39.8	0.0	0.0	0.0	714	0.0	0.0	0.0	714
19	46.2	39.9	0.0	0.0	0.0	714	0.0	0.0	0.0	714
20	45.1	39.7	0.0	0.0	0.0	714	0.0	0.0	0.0	714
21	43.8	39.2	0.0	0.0	0.0	714	0.0	0.0	0.0	714
22	42.3	38.3	0.0	0.0	0.0	714	0.0	0.0	0.0	714
23	40.7	37.2	0.0	0.0	0.0	714	0.0	0.0	0.0	714
24	39.1	35.8	0.0	0.0	0.0	714	0.0	0.0	0.0	714
		Sunday						M	onday	
	Tyr	pical			Chiller				Chiller	
	OADB	OAWB	Load	Load	Demand	Capacity	Load	Load	Demand	Capacity
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)		(Ton)	(kW)	(Ton-Hr)
1	37.5	34.5	0.0	43.9	59.6	751	0.0	43.9	59.6	751
2	36.0	33.0	0.0	0.0	0.0	743	0.0	0.0	0.0	743
3	34.7	31.8	0.0	14.9	24.5	751	0.0	14.9	24.5	751
4	33.6	30.9	0.0	0.0	0.0	743	0.0	0.0	0.0	743
5	32.8	30.1	0.0	14.9	24.5	751	0.0	14.9	24.5	751
6	32.2	29.8	0.0	0.0	0.0	743	0.0	0.0	0.0	743
7	32.1	29.6	0.0	14.9	24.5	751	0.0	14.9	24.5	751
8	32.5	30.3	0.0	0.0	0.0	743	0.0	0.0	0.0	743
9	33.9	31.6	0.0	0.0	0.0	743	0.0	0.0	0.0	743
10	36.0	33.0	0.0	0.0	0.0	743	0.0	0.0	0.0	743
11	38.5	34.8	0.0	0.0	0.0	743	0.0	0.0	0.0	743
12	41.3	36.5	0.0	0.0	0.0	743	0.0	0.0	0.0	743
13	43.8	38.1	0.0	0.0	0.0	736	0.0	0.0	0.0	736
14	45.9	39.5	0.0	0.0	0.0	729	0.0	0.0	0.0	729
15	47.2	40.4	0.0	0.0	0.0	721	0.0	0.0	0.0	721
16	47.7	40.6	0.0	0.0	0.0	714	0.0	0.0	0.0	714
17	47.5	40.2	0.0	0.0	0.0	714	0.0	0.0	0.0	714
18	47.0	39.8	0.0	0.0	0.0	714	0.0	0.0	0.0	714
19	46.2	39.9	0.0	0.0	0.0	714	0.0	0.0	0.0	714
20	45.1	39.7	0.0	0.0	0.0	714	0.0	0.0	0.0	714
21	43.8	39.2	0.0	0.0	0.0	714	0.0	0.0	0.0	714
22	42.3	38.3	0.0	0.0	0.0	714	0.0	0.0	0.0	714
23	40.7	37.2	0.0	0.0	0.0	714	0.0	0.0	0.0	714
24	39.1	35.8	0.0	0.0	0.0	714	0.0	0.0	0.0	714

COLD THERMAL STORAGE - ALTERNATIVE 1 BLDG G101, ECO #13

---- BUILDING COOLING DEMANDS AND THERMAL STORAGE----

March

			Design					
	Desi	Lgn	Cooling	Chiller	Chiller	Storage		
	OADB	OAWB	Load	Load	Demand	Capacity		
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)		
1	51.8	42.9	0.0	43.9	59.6	751		
2	50.8	42.1	0.0	0.0	0.0	743		
3	50.0	41.8	0.0	14.9	24.5	751		
4	49.3	41.1	0.0	0.0	0.0	743		
5	49.1	41.1	0.0	14.9	24.5	751		
6	49.5	41.6	0.0	0.0	0.0	743		
7	50.6	42.7	0.0	14.9	24.5	751		
8	52.5	44.3	0.0	0.0	0.0	743		
9	55.2	46.4	0.0	0.0	0.0	743		
10	58.3	48.5	0.0	0.0	0.0	743		
11	61.8	50.3	0.0	0.0	0.0	743		
12	65.1	51.9	0.0	0.0	0.0	743		
13	67.6	53.4	0.0	0.0	0.0	736		
14	69.3	53.9	0.0	0.0	0.0	729		
15	69.9	53.8	0.0	0.0	0.0	721		
16	69.3	53.1	0.0	0.0	0.0	714		
17	67.8	51.8	0.0	0.0	0.0	714		
18	65.6	50.2	0.0	0.0	0.0	714		
19	62.9	48.9	0.0	0.0	0.0	714		
20	60.2	47.7	0.0	0.0	0.0	714		
21	57.9	46.5	0.0	0.0	0.0	714		
22	55.8	45.3	0.0	0.0	0.0	714		
23	54.1	44.4	0.0	0.0	0.0	714		
24	52.9	43.7	0.0	0.0	0.0	714		

				Wa	ekday		Saturday			
	יטיווי	pical	Cooling	Chiller	Chiller	Storage	Cooling	Chiller	Chiller	Storage
	OADB	OAWB	Load	Load	Demand	Capacity	Load	Load	Demand	Capacity
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)
1	45.4	41.6	0.0	43.9	59.6	751	0.0	43.9	59.6	751
2	43.3	39.7	0.0	0.0	0.0	743	0.0	0.0	0.0	743
3	41.6	38.6	0.0	14.9	24.5	751	0.0	14.9	24.5	751
4	40.6	37.5	0.0	0.0	0.0	743	0.0	0.0	0.0	743
5	40.2	37.3	0.0	14.9	24.5	751	0.0	14.9	24.5	751
6	40.6	37.8	0.0	0.0	0.0	743	0.0	0.0	0.0	743
7	41.6	39.0	0.0	14.9	24.5	751	0.0	14.9	24.5	751
8	43.3	40.7	0.0	0.0	0.0	743	0.0	0.0	0.0	743
9	45.4	42.5	0.0	0.0	0.0	743	0.0	0.0	0.0	743
10	47.9	44.3	0.0	0.0	0.0	743	0.0	0.0	0.0	743
11	50.6	45.5	0.0	0.0	0.0	743	0.0	0.0	0.0	743
12	53.3	46.8	0.0	0.0	0.0	743	0.0	0.0	0.0	743
13	55.8	48.5	0.0	0.0	0.0	736	0.0	0.0	0.0	736
14	58.0	49.6	0.0	0.0	0.0	729	0.0	0.0	0.0	729
15	59.6	50.3	0.0	0.0	0.0	721	0.0	0.0	0.0	721

				We	ekday		Saturday			
	Tvi	pical		Chiller		Storage		Chiller	Chiller	Storage
	OADB	QAWB	Load	Load	Demand			Load	Demand	Capacity
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)
2042	(-)	(- /	(/	(,	(,	(,	` ,	` '		, ,
16	60.7	50.9	0.0	0.0	0.0	714	0.0	0.0	0.0	714
17	61.0	50.9	0.0	0.0	0.0	714	0.0	0.0	0.0	714
18	60.7	50.7	0.0	0.0	0.0	714	0.0	0.0	0.0	714
19	59.6	50.7	0.0	0.0	0.0	714	0.0	0.0	0.0	714
20	58.0	50.5	0.0	0.0	0.0	714	0.0	0.0	0.0	714
21	55.8	49.4	0.0	0.0	0.0	714	0.0	0.0	0.0	714
22	53.3	47.8	0.0	0.0	0.0	714	0.0	0.0	0.0	714
23	50.6	45.9	0.0	0.0	0.0	714	0.0	0.0	0.0	714
24	47.9	43.8	0.0	0.0	0.0	714	0.0	0.0	0.0	714
			Sunday						-	
		pical						Chiller		Storage
	OADB	OAWB	Load	Load	Demand			Load	Demand	
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)
1	45.4	41.6	0.0	43.9	59.6	751	0.0	43.9	59.6	751
2	43.3	39.7	0.0	0.0	0.0	743	0.0	0.0	0.0	743
3	41.6	38.6	0.0	14.9	24.5	751	0.0	14.9	24.5	751
4	40.6	37.5	0.0	0.0	0.0	743	0.0	0.0	0.0	743
5	40.2	37.3	0.0	14.9	24.5	751	0.0	14.9	24.5	751
								0.0	0.0	743
										751
										743
									0.0	743
								0.0	0.0	743
								0.0	0.0	743
					0.0	743	0.0	0.0	0.0	743
					0.0	736	0.0	0.0	0.0	736
					0.0	729	0.0	0.0	0.0	729
					0.0	721	0.0	0.0	0.0	721
					0.0	714	0.0	0.0	0.0	714
					0.0	714	0.0	0.0	0.0	714
						714	0.0	0.0	0.0	714
		50.7	0.0	0.0	0.0	714	0.0	0.0	0.0	714
		50.5		0.0	0.0	714	0.0	0.0	0.0	714
					0.0	714	0.0	0.0	0.0	714
				0.0	0.0	714	0.0	0.0	0.0	714
23		45.9	0.0	0.0	0.0	714	0.0	0.0	0.0	714
24	47.9	43.8	0.0	0.0	0.0	714	0.0	0.0	0.0	714
	40.6 41.6 43.3 45.4 47.9 50.6 53.3 55.8 58.0 59.6 60.7 61.0 60.7 59.6 58.0 59.6 59.6 47.9	50.5 49.4 47.8 45.9	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0	736 729 721 714 714 714 714 714 714 714	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	14.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	24.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	751 743 743 743 743 743 736 729 721 714 714 714 714 714

---- BUILDING COOLING DEMANDS AND THERMAL STORAGE----

April

			Design					
	Des	lgn	Cooling	Chiller	Chiller	Storage		
	OADB	OAWB	Load	Load	Demand	Capacity		
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)		
_					55.6	25.		
1	62.6	52.5	0.0	43.9	59.6	751		
2	61.6	52.1	0.0	0.0	0.0	743		
3	60.9	51.6	0.0	14.9	24.5	751		
4	60.3	51.2	0.0	0.0	0.0	743		
5	60.1	51.3	0.0	14.9	24.5	751		
6	60.5	51.9	0.0	0.0	0.0	743		
7	61.4	53.0	0.0	14.9	24.5	751		
8	63.2	54.5	0.0	0.0	0.0	743		
9	65.7	55.8	0.0	0.0	0.0	743		
10	68.6	57.1	0.0	0.0	0.0	743		
11	71.9	58.6	0.0	0.0	0.0	743		
12	75.0	60.3	0.0	0.0	0.0	743		
13	77.4	61.5	0.0	0.0	0.0	736		
14	78.9	62.2	0.0	0.0	0.0	729		
15	79.5	62.5	0.0	0.0	0.0	721		
16	78.9	61.8	0.0	0.0	0.0	714		
17	77.5	60.3	0.0	0.0	0.0	714		
18	75.4	59.1	0.0	0.0	0.0	714		
19	72.9	57.3	0.0	0.0	0.0	714		
20	70.4	56.5	0.0	0.0	0.0	714		
21	68.2	55.7	0.0	0.0	0.0	714		
22	66.3	55.0	0.0	0.0	0.0	714		
23	64.7	54.0	0.0	0.0	0.0	714		
24	63.6	53.2	0.0	0.0	0.0	714		
24	03.0	33.2	0.0	0.0	0.0	, 14		

				We	ekday		Saturday			
	Тур	pical	Cooling	Chiller	Chiller	Storage	Cooling	Chiller	Chiller	Storage
	OADB	OAWB	Load	Load	Demand	Capacity	Load	Load	Demand	Capacity
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)
1	57.7	53.9	0.0	43.9	59.6	751	0.0	43.9	59.6	751
2	55.9	52.7	0.0	0.0	0.0	743	0.0	0.0	0.0	743
3	54.2	51.3	0.0	14.9	24.5	751	0.0	14.9	24.5	751
4	52.9	50.2	0.0	0.0	0.0	743	0.0	0.0	0.0	743
5	51.9	49.6	0.0	14.9	24.5	751	0.0	14.9	24.5	751
6	51.2	49.2	0.0	0.0	0.0	743	0.0	0.0	0.0	743
7	51.0	49.3	0.0	14.9	24.5	751	0.0	14.9	24.5	751
8	51.6	49.9	0.0	0.0	0.0	743	0.0	0.0	0.0	743
9	53.3	50.6	0.0	0.0	0.0	743	0.0	0.0	0.0	743
10	55.9	51.8	0.0	0.0	0.0	743	0.0	0.0	0.0	743
11	59.0	53.4	0.0	0.0	0.0	743	0.0	0.0	0.0	743
12	62.4	55.6	0.0	0.0	0.0	743	0.0	0.0	0.0	743
13	65.5	57.7	0.0	0.0	0.0	736	0.0	0.0	0.0	736
14	68.1	59.4	0.0	0.0	0.0	729	0.0	0.0	0.0	729
15	69.8	60.7	0.0	0.0	0.0	721	0.0	0.0	0.0	721

Trane Air Conditioning Economics
By: Trane Customer Direct Service Network

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				Weekday		Saturday				
	ጥረታ	pical	Cooling	Chiller	Chiller	Storage	Cooling			
	OADB	OAWB	Load	Load	Demand			Load	Demand	Capacity
Hour	(F)	(F)	(Ton)	(Ton)		(Ton-Hr)		(Ton)		
нош	(F)	(F)	(LOII)	(1011)	(~ ")	(1011 111)	(±0)	(10)	(1417)	(2011 112)
16	70.4	60.9	0.0	0.0	0.0	714	0.0	0.0	0.0	714
17	70.2	60.2	0.0	0.0	0.0	714	0.0	0.0	0.0	714
18	69.5	60.1	0.0	0.0	0.0	714	0.0	0.0	0.0	714
19	68.5	59.4	0.0	0.0	0.0	714	0.0	0.0	0.0	714
20	67.2	59.7	0.0	0.0	0.0	714	0.0	0.0	0.0	714
21	65.5	59.3	0.0	0.0	0.0	714	0.0	0.0	0.0	714
22	63.7	58.8	0.0	0.0	0.0	714	0.0	0.0	0.0	714
23	61.7	57.3	0.0	0.0	0.0	714	0.0		0.0	714
24	59.7	55.6	0.0	0.0	0.0	714	0.0	0.0	0.0	714
				G	unday			M	onder	
	m.	pical		Chiller	Chiller	Storage	Cooling			
		OAWB	Load	Load		Capacity		Load		
	OADB	(F)	(Ton)			(Ton-Hr)		(Ton)		
Hour	(F)	(F)	(TOIL)	(TOIL)	(kW)	(ION-HI)	(1011)	(1011)	(~ ,	(10 111)
1	57.7	53.9	0.0	43.9	59.6	751	0.0	43.9	59.6	751
2	55.9	52.7	0.0	0.0	0.0	743	0.0	0.0	0.0	743
3	54.2	51.3	0.0	14.9	24.5	751	0.0	14.9	24.5	751
4	52.9	50.2	0.0	0.0	0.0	743	0.0	0.0		743
5	51.9	49.6	0.0	14.9	24.5	751	0.0	14.9	24.5	751
6	51.2	49.2	0.0	0.0	0.0	743	0.0	0.0	0.0	743
7	51.0	49.3	0.0	14.9	24.5	751	0.0	14.9	24.5	751
8	51.6	49.9	0.0	0.0	0.0	743	0.0	0.0	0.0	743
9	53.3	50.6	0.0	0.0	0.0	743	0.0	0.0	0.0	743
10	55.9	51.8	0.0	0.0	0.0	743	0.0	0.0	0.0	743
11	59.0	53.4	0.0	0.0	0.0	743	0.0	0.0	0.0	743
12	62.4	55.6	0.0	0.0	0.0	743	0.0	0.0	0.0	743
13	65.5	57.7	0.0	0.0	0.0	736	0.0	0.0	0.0	736
14	68.1	59.4	0.0	0.0	0.0	729	0.0	0.0	0.0	729
15	69.8	60.7	0.0	0.0	0.0	721	0.0	0.0	0.0	721
16	70.4	60.9	0.0	0.0	0.0	714	0.0	0.0	0.0	714
17	70.2	60.2	0.0	0.0	0.0	714	0.0	0.0	0.0	714
18	69.5	60.1	0.0	0.0	0.0	714	0.0	0.0	0.0	714
19	68.5	59.4	0.0	0.0	0.0	714	0.0	0.0	0.0	714
20	67.2	59.7	0.0	0.0	0.0	714	0.0	0.0	0.0	714
21	65.5	59.3	0.0	0.0	0.0	714	0.0	0.0	0.0	714
22	63.7	58.8	0.0	0.0	0.0	714	0.0		0.0	714
23	61.7	57.3	0.0	0.0	0.0	714	0.0	0.0	0.0	714
24	59.7	55.6	0.0	0.0	0.0	714	0.0	0.0	0.0	714

---- BUILDING COOLING DEMANDS AND THERMAL STORAGE----

May

			Design						
	Des	ign	Cooling	Chiller	Chiller	Storage			
	OADB	OAWB	Load	Load	Demand	Capacity			
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)			
1	70.8	59.3	0.0	43.9	59.6	751			
2	69.8	58.5	0.0	0.0	0.0	743			
3	69.0	58.2	0.0	14.9	24.5	751			
4	68.4	58.1	0.0	0.0	0.0	743			
5	68.2	58.0	0.0	14.9	24.5	751			
6	68.6	58.5	0.0	0.0	0.0	743			
7	69.6	59.5	0.0	14.9	24.5	751			
8	71.3	60.6	0.0	0.0	0.0	743			
9	73.9	61.5	0.0	0.0	0.0	743			
10	76.8	62.7	0.0	0.0	0.0	743			
11	80.1	63.9	0.0	0.0	0.0	743			
12	83.2	65.4	0.0	0.0	0.0	743			
13	85.6	66.5	81.3	0.0	0.0	655			
14	87.1	67.1	105.2	0.0	0.0	543			
15	87.7	67.2	112.1	0.0	0.0	425			
16	87.1	66.5	111.9	0.0	0.0	309			
17	85.8	65.1	0.0	0.0	0.0	309			
18	83.6	63.9	0.0	0.0	0.0	309			
19	81.1	62.4	0.0	0.0	0.0	309			
20	78.6	61.6	0.0	0.0	0.0	309			
21	76.4	61.8	0.0	0.0	0.0	309			
22	74.5	60.9	0.0	0.0	0.0	309			
23	72.9	60.3	0.0	0.0	0.0	309			
24	71.7	59.9	0.0	0.0	0.0	309			

				We	ekday	Saturday				
	Ty	pical	Cooling	Chiller	Chiller	Storage	Cooling	Chiller	Chiller	Storage
	OADB	OAWB	Load	Load	Demand	Capacity	Load	Load	Demand	Capacity
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)
1	66.6	62.3	0.0	125.0	140.2	431	0.0	125.0	140.2	564
2	64.5	60.4	0.0	125.0	140.2	552	0.0	125.0	140.2	684
3	62.7	59.1	0.0	125.0	140.2	671	0.0	74.3	84.4	751
4	61.2	58.1	0.0	86.3	96.0	751	0.0	0.0	0.0	743
5	60.0	57.1	0.0	0.0	0.0	743	0.0	14.9	24.5	751
6	59.3	56.6	0.0	14.9	24.5	751	0.0	0.0	0.0	743
7	59.0	56.5	0.0	0.0	0.0	743	0.0	14.9	24.5	751
8	59.5	56.6	0.0	14.9	24.5	751	0.0	0.0	0.0	743
9	60.9	56.6	0.0	0.0	0.0	751	0.0	0.0	0.0	743
10	63.0	57.2	0.0	0.0	0.0	751	0.0	0.0	0.0	743
11	65.7	58.1	0.0	0.0	0.0	751	0.0	0.0	0.0	743
12	68.7	59.8	0.0	0.0	0.0	751	0.0	0.0	0.0	743
13	71.7	61.6	50.6	0.0	0.0	693	19.8	0.0	0.0	716
14	74.5	63.4	71.1	0.0	0.0	615	24.1	0.0	0.0	685
15	76.6	64.8	79.7	0.0	0.0	529	32.1	0.0	0.0	646

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				Wo	okday		Saturday			
	m	oical				Storage			-	
	OADB	OAWB	Load	Load		-	Load	Load	Demand	
						Capacity (Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(TON-HI)	(TOIL)	(TOR)	(KW)	(TON-HE)
16	78.0	65.6	80.0	0.0	0.0	444	38.1	0.0	0.0	601
17	78.5	65.6	0.0	0.0	0.0	444	0.0	0.0	0.0	601
18	78.2	65.8	0.0	0.0	0.0	444	0.0	0.0	0.0	601
19	77.5	65.6	0.0	0.0	0.0	444	0.0	0.0	0.0	601
20	76.3	66.1	0.0	0.0	0.0	444	0.0	0.0	0.0	601
21	74.8	67.2	0.0	0.0	0.0	444	0.0	0.0	0.0	601
22	73.0	66.4	0.0	0.0	0.0	444	0.0	0.0	0.0	601
23	70.9	65.4	0.0	0.0	0.0	444	0.0	0.0	0.0	601
24	68.7	64.0	0.0	0.0	0.0	444	0.0	0.0	0.0	601
				S	unday			M	londav	
	Tvi	pical				Storage			-	
	OADB	OAWB	Load	Load	Demand			Load	Demand	
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)				(Ton-Hr)
HOUL	(-)	(-)	(10)	(1011)	()	(,	(,	()	, ,	,
1	66.6	62.3	0.0	125.0	140.2	720	0.0	125.0	140.2	728
2	64.5	60.4	0.0	37.8	55.4	751	0.0	30.7	50.3	751
3	62.7	59.1	0.0	0.0	0.0	743	0.0	0.0	0.0	743
4	61.2	58.1	0.0	14.9	24.5	751	0.0	14.9	24.5	751
5	60.0	57.1	0.0	0.0	0.0	743	0.0	0.0	0.0	743
6	59.3	56.6	0.0	14.9	24.5	751	0.0	14.9	24.5	751
7	59.0	56.5	0.0	0.0	0.0	743	0.0	0.0	0.0	743
8	59.5	56.6	0.0	14.9	24.5	751	0.0	14.9	24.5	751
9	60.9	56.6	0.0	0.0	0.0	751	0.0	0.0	0.0	751
10	63.0	57.2	0.0	0.0	0.0	751	0.0	0.0	0.0	751
11	65.7	58.1	0.0	0.0	0.0	751	0.0	0.0	0.0	751
12	68.7	59.8	0.0	0.0	0.0	751	0.0	0.0	0.0	751
13	71.7	61.6	19.8	0.0	0.0	724	50.6	0.0	0.0	693
14	74.5	63.4	24.1	0.0	0.0	692	71.1	0.0	0.0	615
15	76.6	64.8	32.1	0.0	0.0	653	79.8	0.0	0.0	529
16	78.0	65.6	38.1	0.0	0.0	609	80.0	0.0	0.0	444
17	78.5	65.6	0.0	0.0	0.0	609	0.0	0.0	0.0	444
18	78.2	65.8	0.0	0.0	0.0	609	0.0	0.0	0.0	444
19	77.5	65.6	0.0	0.0	0.0	609	0.0	0.0	0.0	444
20	76.3	66.1	0.0	0.0	0.0	609	0.0	0.0	0.0	444
21	74.8	67.2	0.0	0.0	0.0	609	0.0	0.0	0.0	444
22	73.0	66.4	0.0	0.0	0.0	609	0.0	0.0	0.0	444
23	70.9	65.4	0.0	0.0	0.0	609	0.0	0.0	0.0	444
24	68.7	64.0	0.0	0.0	0.0	609	0.0	0.0	0.0	444

---- BUILDING COOLING DEMANDS AND THERMAL STORAGE----

June

			Design						
	Des	ign	Cooling	Chiller	Chiller	Storage			
	OADB	OAWB	Load	Load	Demand	Capacity			
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)			
,	79.5	66.2	0.0	125.0	145.5	564			
1			0.0	125.0	144.3	683			
2	78.5	65.3			86.3	751			
3	77.7	65.1	0.0	74.3					
4	77.2	64.8	0.0	0.0	0.0	743			
5	77.0	65.1	0.0	14.9	24.9	751			
6	77.4	65.6	0.0	0.0	0.0	743			
7	78.3	66.5	0.0	14.9	25.1	751			
8	80.0	67.7	0.0	0.0	0.0	743			
9	82.5	68.3	0.0	0.0	0.0	743			
10	85.4	69.5	0.0	0.0	0.0	743			
11	88.7	70.8	0.0	0.0	0.0	743			
12	91.8	72.2	0.0	0.0	0.0	743			
13	94.1	72.6	107.2	0.0	0.0	629			
14	95.6	72.9	135.8	0.0	0.0	487			
15	96.2	72.9	139.5	0.0	0.0	342			
16	95.6	72.0	138.6	0.0	0.0	200			
17	94.3	70.8	0.0	0.0	0.0	200			
18	92.1	69.7	0.0	0.0	0.0	200			
19	89.6	68.3	0.0	0.0	0.0	200			
20	87.1	67.7	0.0	0.0	0.0	200			
21	85.0	67.5	0.0	0.0	0.0	200			
22	83.1	67.3	0.0	0.0	0.0	200			
23	81.6	66.8	0.0	0.0	0.0	200			
24	80.4	66.3	0.0	0.0	0.0	200			
		23.3	•••						

	Weekday						Saturday				
	Ту	pical	Cooling	Chiller	Chiller	Storage	Cooling	Chiller	Chiller	Storage	
	OADB	OAWB	Load	Load	Demand	Capacity	Load	Load	Demand	Capacity	
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)	
1	73.0	67.9	0.0	125.0	140.2	323	0.0	125.0	140.2	421	
2	71.2	66.1	0.0	125.0	140.2	445	0.0	125.0	140.2	542	
3	69.7	65.2	0.0	125.0	140.2	566	0.0	125.0	140.2	661	
4	68.5	64.3	0.0	125.0	140.2	685	0.0	96.5	106.6	751	
5	67.8	64.2	0.0	72.7	83.0	751	0.0	0.0	0.0	743	
6	67.6	64.2	0.0	0.0	0.0	743	0.0	14.9	24.5	751	
7	68.1	64.8	0.0	14.9	24.5	751	0.0	0.0	0.0	743	
8	69.4	65.7	0.0	0.0	0.0	743	0.0	14.9	24.5	751	
9	71.6	66.2	0.0	0.0	0.0	743	0.0	0.0	0.0	751	
10	74.2	67.2	0.0	0.0	0.0	743	0.0	0.0	0.0	751	
11	77.2	68.5	0.0	0.0	0.0	743	0.0	0.0	0.0	751	
12	80.2	70.0	0.0	0.0	0.0	743	0.0	0.0	0.0	751	
13	82.8	70.8	81.8	0.0	0.0	654	51.9	0.0	0.0	692	
14	85.0	71.6	110.5	0.0	0.0	537	61.0	0.0	0.0	624	
15	86.3	72.3	114.9	0.0	0.0	417	66.8	0.0	0.0	551	

Trane Air Conditioning Economics
By: Trane Customer Direct Service Network

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	Weekday						Saturday			
	יטיד	pical	Cooling	Chiller	Chiller	Storage	Cooling			
	OADB	OAWB	Load	Load	Demand		Load	Load	Demand	
Hour	(F)	(F)	(Ton)	(Ton)			(Ton)	(Ton)		
nour	(-)	(- /	(2011)	(2011)	()	(,	, ,	•		,
16	86.8	72.1	114.0	0.0	0.0	299	64.4	0.0	0.0	481
17	86.6	71.7	0.0	0.0	0.0	299	0.0	0.0	0.0	481
18	85.8	71.5	0.0	0.0	0.0	299	0.0	0.0	0.0	481
19	84.7	71.2	0.0	0.0	0.0	299	0.0	0.0	0.0	481
20	83.2	71.5	0.0	0.0	0.0	299	0.0	0.0	0.0	481
21	81.4	71.7	0.0	0.0	0.0	299	0.0	0.0	0.0	481
22	79.3	71.4	0.0	0.0	0.0	299	0.0	0.0	0.0	481
23	77.2	70.5	0.0	0.0	0.0	299	0.0	0.0	0.0	481
24	75.1	69.1	0.0	0.0	0.0	299	0.0	0.0	0.0	481
					unday			M	onday	
	Тy	pical	_	Chiller		Storage				
	OADB	OAWB	Load	Load		Capacity (Ton-Hr)	Load	Load		
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)
_				125.0	140.0	601	0.0	125.0	140.2	594
1	73.0	67.9	0.0	125.0	140.2 140.2	720	0.0	125.0	140.2	713
2	71.2	66.1	0.0 0.0	125.0 38.3	55.7	720 751	0.0	45.3	60.6	751
3	69.7	65.2		0.0	0.0	743	0.0	0.0	0.0	743
4	68.5	64.3 64.2	0.0	14.9	24.5	751	0.0	14.9	24.5	751
5	67.8	64.2	0.0	0.0	0.0	743	0.0	0.0	0.0	743
6 7	67.6 68.1	64.8	0.0	14.9	24.5	751	0.0	14.9	24.5	751
8	69.4	65.7	0.0	0.0	0.0	743	0.0	0.0	0.0	743
9	71.6	66.2	0.0	0.0	0.0	743	0.0	0.0	0.0	743
10	74.2	67.2	0.0	0.0	0.0	743	0.0	0.0	0.0	743
11	77.2	68.5	0.0	0.0	0.0	743	0.0	0.0	0.0	743
12	80.2	70.0	0.0	0.0	0.0	743	0.0	0.0	0.0	743
13	82.8	70.8	51.9	0.0	0.0	684	81.8	0.0	0.0	654
14	85.0	71.6	61.0	0.0	0.0	616	110.5	0.0	0.0	537
15	86.3	72.3	66.8	0.0	0.0	543	114.9	0.0	0.0	417
16	86.8	72.1	64.4	0.0	0.0	473	114.0	0.0	0.0	299
17	86.6	71.7	0.0	0.0	0.0	473	0.0	0.0	0.0	299
18	85.8	71.5	0.0	0.0	0.0	473	0.0	0.0	0.0	299
19	84.7	71.2	0.0	0.0	0.0	473	0.0	0.0	0.0	299
20	83.2	71.5	0.0	0.0	0.0	473	0.0	0.0	0.0	299
21	81.4	71.7	0.0	0.0	0.0	473	0.0	0.0	0.0	299
22	79.3	71.4	0.0	0.0	0.0	473	0.0	0.0	0.0	299
23	77.2	70.5	0.0	0.0	0.0	473	0.0	0.0	0.0	299
24	75.1	69.1	0.0	0.0	0.0	473	0.0	0.0	0.0	299
	, , , , ,	03.1	0.0							

COLD THERMAL STORAGE - ALTERNATIVE 1 BLDG G101, ECO #13

---- BUILDING COOLING DEMANDS AND THERMAL STORAGE----

July

			Design						
	Des:	ign	Cooling	Chiller	Chiller	Storage			
	OADB	OAWB	Load	Load	Demand	Capacity			
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)			
1	78.9	67.7	0.0	125.0	144.8	421			
2	78.2	67.2	0.0	125.0	143.9	542			
3	77.6	66.8	0.0	125.0	143.3	661			
4	77.1	66.6	0.0	96.5	108.5	751			
5	77.0	66.6	0.0	0.0	0.0	743			
6	77.3	66.9	0.0	14.9	24.9	751			
7	78.0	67.6	0.0	0.0	0.0	743			
8	79.4	68.8	0.0	14.9	25.4	751			
9	81.3	69.6	0.0	0.0	0.0	751			
10	83.6	70.7	0.0	0.0	0.0	751			
11	86.1	72.2	0.0	0.0	0.0	751			
12	88.5	73.3	0.0	0.0	0.0	751			
13	90.3	74.0	108.1	0.0	0.0	635			
14	91.5	74.3	135.0	0.0	0.0	494			
15	92.0	74.0	139.0	0.0	0.0	350			
16	91.5	73.2	138.3	0.0	0.0	208			
17	90.5	72.1	0.0	0.0	0.0	208			
18	88.8	70.8	0.0	0.0	0.0	208			
19	86.9	70.4	0.0	0.0	0.0	208			
20	84.9	70.2	0.0	0.0	0.0	208			
21	83.3	70.0	0.0	0.0	0.0	208			
22	81.8	69.4	0.0	0.0	0.0	208			
23	80.6	68.7	0.0	0.0	0.0	208			
24	79.7	68.4	0.0	0.0	0.0	208			

				We	ekday		Saturday				
	Typ	pical	Cooling	Chiller	Chiller	Storage	Cooling	Chiller	Chiller	Storage	
	OADB	OAWB	Load	Load	Demand	Capacity	Load	Load	Demand	Capacity	
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)	
1	72.0	69.3	0.0	125.0	140.2	331	0.0	125.0	140.2	432	
2	70.5	68.0	0.0	125.0	140.2	453	0.0	125.0	140.2	553	
3	69.4	67.1	0.0	125.0	140.2	573	0.0	125.0	140.2	673	
4	68.5	66.4	0.0	125.0	140.2	693	0.0	85.1	94.8	751	
5	67.9	66.0	0.0	65.3	76.4	751	0.0	0.0	0.0	743	
6	67.7	65.9	0.0	0.0	0.0	743	0.0	14.9	24.5	751	
7	68.1	66.3	0.0	14.9	24.5	751	0.0	0.0	0.0	743	
8	69.1	67.3	0.0	0.0	0.0	743	0.0	14.9	24.5	751	
9	70.8	68.0	0.0	0.0	0.0	743	0.0	0.0	0.0	751	
10	72.9	69.1	0.0	0.0	0.0	743	0.0	0.0	0.0	751	
11	75.2	70.5	0.0	0.0	0.0	743	0.0	0.0	0.0	751	
12	77.5	71.7	0.0	0.0	0.0	743	0.0	0.0	0.0	751	
13	79.6	72.7	77.9	0.0	0.0	658	49.4	0.0	0.0	694	
14	81.3	73.5	108.2	0.0	0.0	543	57.4	0.0	0.0	630	
15	82.3	73.7	112.0	0.0	0.0	426	63.8	0.0	0.0	560	

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				**-	-1		Saturday			
						**			-	
		pical	_			Storage	Load	Load	Demand	-
_	OADB	OAWB	Load	Load	Demand	Capacity				Capacity (Ton-Hr)
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(TON-HI)
16	82.7	73.5	111.0	0.0	0.0	311	61.2	0.0	0.0	493
17	82.5	73.1	0.0	0.0	0.0	311	0.0	0.0	0.0	493
18	82.0	72.6	0.0	0.0	0.0	311	0.0	0.0	0.0	493
19	81.1	73.2	0.0	0.0	0.0	311	0.0	0.0	0.0	493
20	79.9	73.8	0.0	0.0	0.0	311	0.0	0.0	0.0	493
21	78.5	73.9	0.0	0.0	0.0	311	0.0	0.0	0.0	493
22	76.9	73.1	0.0	0.0	0.0	311	0.0	0.0	0.0	493
23	75.2	71.9	0.0	0.0	0.0	311	0.0	0.0	0.0	493
24	73.5	70.8	0.0	0.0	0.0	311	0.0	0.0	0.0	493
				S	unday			M	londav	
	ጥህ	pical				Storage				Storage
	OADB	OAWB	Load	Load		Capacity	Load	Load	Demand	Capacity
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)			(Ton-Hr)
	(- /	(- /	(====,	(22.0)	()	\ ,	\,	,,	` .	,
1	72.0	69.3	0.0	125.0	140.2	613	0.0	125.0	140.2	606
2	70.5	68.0	0.0	125.0	140.2	732	0.0	125.0	140.2	725
3	69.4	67.1	0.0	26.6	43.5	751	0.0	33.6	52.6	751
4	68.5	66.4	0.0	0.0	0.0	743	0.0	0.0	0.0	743
5	67.9	66.0	0.0	14.9	24.5	751	0.0	14.9	24.5	751
6	67.7	65.9	0.0	0.0	0.0	743	0.0	0.0	0.0	743
7	68.1	66.3	0.0	14.9	24.5	751	0.0	14.9	24.5	751
8	69.1	67.3	0.0	0.0	0.0	743	0.0	0.0	0.0	743
9	70.8	68.0	0.0	0.0	0.0	743	0.0	0.0	0.0	743
10	72.9	69.1	0.0	0.0	0.0	743	0.0	0.0	0.0	743
11	75.2	70.5	0.0	0.0	0.0	743	0.0	0.0	0.0	743
12	77.5	71.7	0.0	0.0	0.0	743	0.0	0.0	0.0	743
13	79.6	72.7	49.4	0.0	0.0	687	77.9	0.0	0.0	658
14	81.3	73.5	57.4	0.0	0.0	622	108.2	0.0	0.0	543
15	82.3	73.7	63.8	0.0	0.0	552	112.0	0.0	0.0	426
16	82.7	73.5	61.2	0.0	0.0	486	111.0	0.0	0.0	311
17	82.5	73.1	0.0	0.0	0.0	486	0.0	0.0	0.0	311
18	82.0	72.6	0.0	0.0	0.0	486	0.0	0.0	0.0	311
19	81.1	73.2	0.0	0.0	0.0	486	0.0	0.0	0.0	311
20	79.9	73.8	0.0	0.0	0.0	486	0.0	0.0	0.0	311
21	78.5	73.9	0.0	0.0	0.0	486	0.0	0.0	0.0	311
22	76.9	73.1	0.0	0.0	0.0	486	0.0	0.0	0.0	311
23	75.2	71.9	0.0	0.0	0.0	486	0.0	0.0	0.0	311
24	73.5	70.8	0.0	0.0	0.0	486	0.0	0.0	0.0	311

COLD THERMAL STORAGE - ALTERNATIVE 1 BLDG G101, ECO #13

---- BUILDING COOLING DEMANDS AND THERMAL STORAGE----

August

			Design					
	Des	ign	Cooling	Chiller	Chiller	Storage		
	OADB	CAWB	Load	Load	Demand	Capacity		
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)		
1	78.6	67.6	0.0	125.0	144.4	432		
2	77.9	67.2	0.0	125.0	143.6	553		
3	77.2	66.9	0.0	125.0	142.8	673		
4	76.8	66.6	0.0	85.1	96.2	751		
5	76.6	66.7	0.0	0.0	0.0	743		
6	76.9	67.1	0.0	14.9	24.8	751		
7	77.7	67.8	0.0	0.0	0.0	743		
8	79.1	69.0	0.0	14.9	25.3	751		
9	81.2	70.0	0.0	0.0	0.0	751		
10	83.5	70.9	0.0	0.0	0.0	751		
11	86.2	71.8	0.0	0.0	0.0	751		
12	88.7	72.7	0.0	0.0	0.0	751		
13	90.6	73.2	105.8	0.0	0.0	638		
14	91.8	73.8	136.3	0.0	0.0	495		
15	92.3	74.0	141.1	0.0	0.0	349		
16	91.8	73.3	139.5	0.0	0.0	206		
17	90.7	72.4	0.0	0.0	0.0	206		
18	89.0	71.4	0.0	0.0	0.0	206		
19	87.0	70.1	0.0	0.0	0.0	206		
20	84.9	69.8	0.0	0.0	0.0	206		
21	83.2	70.3	0.0	0.0	0.0	206		
22	81.6	69.3	0.0	0.0	0.0	206		
23	80.4	68.5	0.0	0.0	0.0	206		
24	79.4	67.9	0.0	0.0	0.0	206		

		Weekday						Saturday				
	Ty	pical	Cooling	Chiller	Chiller	Storage	Cooling	Chiller	Chiller	Storage		
	OADB	OAWB	Load	Load	Demand	Capacity	Load	Load	Demand	Capacity		
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)		
1	72.7	70.2	0.0	125.0	140.2	329	0.0	125.0	140.2	427		
2	71.2	69.0	0.0	125.0	140.2	451	0.0	125.0	140.2	548		
3	69.9	68.0	0.0	125.0	140.2	571	0.0	125.0	140.2	667		
4	68.8	67.1	0.0	125.0	140.2	690	0.0	90.5	100.3	751		
5	68.0	66.6	0.0	67.5	78.3	751	0.0	0.0	0.0	743		
6	67.5	66.2	0.0	0.0	0.0	743	0.0	14.9	24.5	751		
7	67.3	66.1	0.0	14.9	24.5	751	0.0	0.0	0.0	743		
8	67.8	66.5	0.0	0.0	0.0	743	0.0	14.9	24.5	751		
9	69.1	67.0	0.0	0.0	0.0	743	0.0	0.0	0.0	751		
10	71.2	67.8	0.0	0.0	0.0	743	0.0	0.0	0.0	751		
11	73.8	68.7	0.0	0.0	0.0	743	0.0	0.0	0.0	751		
12	76.5	70.0	0.0	0.0	0.0	743	0.0	0.0	0.0	751		
13	79.1	71.2	80.4	0.0	0.0	656	51.1	0.0	0.0	692		
14	81.1	72.6	110.7	0.0	0.0	538	59.3	0.0	0.0	526		
15	82.5	73.6	115.9	0.0	0.0	417	67.0	0.0	0.0	553		

Trane Air Conditioning Economics
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	Weekday						Saturday			
	Tv	pical				Storage				Storage
	OADB	OAWB	Load	Load		Capacity		Load	Demand	Capacity
Hour	(F)	(F)	(Ton)	(Ton)		(Ton-Hr)		(Ton)	(kW)	(Ton-Hr)
	ζ- /	. ,	,,	,,	,	,		• •		
16	83.0	73.7	108.0	0.0	0.0	305	57.5	0.0	0.0	490
17	82.8	73.5	0.0	0.0	0.0	305	0.0	0.0	0.0	490
18	82.3	73.5	0.0	0.0	0.0	305	0.0	0.0	0.0	490
19	81.5	73.1	0.0	0.0	0.0	305	0.0	0.0	0.0	490
20	80.4	73.7	0.0	0.0	0.0	305	0.0	0.0	0.0	490
21	79.1	74.9	0.0	0.0	0.0	305	0.0	0.0	0.0	490
22	77.6	73.9	0.0	0.0	0.0	305	0.0	0.0	0.0	490
23	76.0	72.7	0.0	0.0	0.0	305	0.0	0.0	0.0	490
24	74.3	71.3	0.0	0.0	0.0	305	0.0	0.0	0.0	490
		pical				Storage	-		Chiller	_
	OADB	OAWB	Load	Load	Demand	Capacity	Load	Load	Demand	
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)
•	72.7	70.2	0.0	125.0	140.2	610	0.0	125.0	140.2	603
1 2	71.2	69.0	0.0	125.0	140.2	729	0.0	125.0	140.2	722
3	69.9	68.0	0.0	29.5	48.2	751	0.0	36.5	54.5	751
4	68.8	67.1	0.0	0.0	0.0	743	0.0	0.0	0.0	743
5	68.0	66.6	0.0	14.9	24.5	751	0.0	14.9	24.5	751
6	67.5	66.2	0.0	0.0	0.0	743	0.0	0.0	0.0	743
7	67.3	66.1	0.0	14.9	24.5	751	0.0	14.9	24.5	751
8	67.8	66.5	0.0	0.0	0.0	743	0.0	0.0	0.0	743
9	69.1	67.0	0.0	0.0	0.0	743	0.0	0.0	0.0	743
10	71.2	67.8	0.0	0.0	0.0	743	0.0	0.0	0.0	743
11	73.8	68.7	0.0	0.0	0.0	743	0.0	0.0	0.0	743
12	76.5	70.0	0.0	0.0	0.0	743	0.0	0.0	0.0	743
13	79.1	71.2	51.1	0.0	0.0	685	80.4	0.0	0.0	656
14	81.1	72.6	59.3	0.0	0.0	619	110.7	0.0	0.0	538
15	82.5	73.6	67.0	0.0	0.0	546	115.9	0.0	0.0	417
16	83.0	73.7	57.5	0.0	0.0	483	108.0	0.0	0.0	305
17	82.8	73.5	0.0	0.0	0.0	483	0.0	0.0	0.0	305
18	82.3	73.5	0.0	0.0	0.0	483	0.0	0.0	0.0	305
19	81.5	73.1	0.0	0.0	0.0	483	0.0	0.0	0.0	305
20	80.4	73.7	0.0	0.0	0.0	483	0.0	0.0	0.0	305
21	79.1	74.9	0.0	0.0	0.0	483	0.0	0.0	0.0	305
22	77.6	73.9	0.0	0.0	0.0	483	0.0	0.0	0.0	305
23	76.0	72.7	0.0	0.0	0.0	483	0.0	0.0	0.0	305
24	74.3	71.3	0.0	0.0	0.0	483	0.0	0.0	0.0	305

---- BUILDING COOLING DEMANDS AND THERMAL STORAGE----

September

			Design						
	Des:	ign	Cooling	Chiller	Chiller	Storage			
	OADB	OAWB	Load	Load	Demand	Capacity			
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)			
1	74.6	63.1	0.0	125.0	140.2	427			
2	73.7	62.4	0.0	125.0	140.2	548			
3	73.0	61.9	0.0	125.0	140.2	667			
4	72.4	61.7	0.0	90.5	100.3	751			
5	72.3	61.8	0.0	0.0	0.0	743			
6	72.6	62.5	0.0	14.9	24.5	751			
7	73.5	63.2	0.0	0.0	0.0	743			
8	75.1	64.8	0.0	14.9	24.5	751			
9	77.4	65.9	0.0	0.0	0.0	751			
10	80.0	66.8	0.0	0.0	0.0	751			
11	83.0	67.8	0.0	0.0	0.0	751			
12	85.8	68.5	0.0	0.0	0.0	751			
13	87.9	69.7	96.9	0.0	0.0	647			
14	89.3	70.2	121.5	0.0	0.0	519			
15	89.9	70.1	124.9	0.0	0.0	389			
16	89.3	69.1	122.7	0.0	0.0	262			
17	88.1	67.8	0.0	0.0	0.0	262			
18	86.2	66.8	0.0	0.0	0.0	262			
19	83.9	66.5	0.0	0.0	0.0	262			
20	81.6	66.3	0.0	0.0	0.0	262			
21	79.7	66.1	0.0	0.0	0.0	262			
22	77.9	65.0	0.0	0.0	0.0	262			
23	76.5	64.4	0.0	0.0	0.0	262			
24	75.4	63.6	0.0	0.0	0.0	262			

				We	ekday		Saturday				
	Тут	pical	Cooling	Chiller	Chiller	Storage	Cooling	Chiller	Chiller	Storage	
	OADB	OAWB	Load	Load	Demand	Capacity	Load	Load	Demand	Capacity	
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)	
1	69.8	66.1	0.0	125.0	140.2	384	0.0	125.0	140.2	500	
2	68.0	64.5	0.0	125.0	140.2	505	0.0	125.0	140.2	620	
3	66.3	63.0	0.0	125.0	140.2	625	0.0	125.0	140.2	739	
4	64.9	61.9	0.0	125.0	140.2	744	0.0	19.4	31.8	751	
5	63.9	61.3	0.0	14.3	23.4	751	0.0	0.0	0.0	743	
6	63.2	61.0	0.0	0.0	0.0	743	0.0	14.9	24.5	751	
7	63.0	60.8	0.0	14.9	24.5	751	0.0	0.0	0.0	743	
8	63.4	61.4	0.0	0.0	0.0	743	0.0	14.9	24.5	751	
9	64.7	61.8	0.0	0.0	0.0	743	0.0	0.0	0.0	751	
10	66.6	62.1	0.0	0.0	0.0	743	0.0	0.0	0.0	751	
11	69.1	62.9	0.0	0.0	0.0	743	0.0	0.0	0.0	751	
12	71.8	63.7	0.0	0.0	0.0	743	0.0	0.0	0.0	751	
13	74.5	65.5	64.1	0.0	0.0	672	30.2	0.0	0.0	713	
14	77.0	67.1	89.3	0.0	0.0	576	42.8	0.0	0.0	663	
15	78.9	68.2	91.7	0.0	0.0	478	44.2	0.0	0.0	612	

Trane Air Conditioning Economics
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				We	ekday		Saturday			
	Tv	pical				Storage				Storage
	OADB	OAWB	Load	Load	Demand	_	-	Load	Demand	-
Hour	(F)	(F)	(Ton)	(Ton)		(Ton-Hr)		(Ton)		
	(- /	(- /	(,	()	(,	(,		\ /	(,	` '
16	80.2	68.6	94.7	0.0	0.0	379	44.8	0.0	0.0	562
17	80.6	68.5	0.0	0.0	0.0	379	0.0	0.0	0.0	562
18	80.4	68.9	0.0	0.0	0.0	379	0.0	0.0	0.0	562
19	79.7	70.0	0.0	0.0	0.0	379	0.0	0.0	0.0	562
20	78.7	71.2	0.0	0.0	0.0	379	0.0	0.0	0.0	562
21	77.3	71.6	0.0	0.0	0.0	379	0.0	0.0	0.0	562
22	75.6	70.5	0.0	0.0	0.0	379	0.0	0.0	0.0	562
23	73.7	69.4	0.0	0.0	0.0	379	0.0	0.0	0.0	562
24	71.8	67.7	0.0	0.0	0.0	379	0.0	0.0	0.0	562
		pical	-			Storage				Storage
	OADB	CAWB	Load	Load				Load		
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)
_				105.0	140.0	501		125.0	140.2	681
1	69.8	66.1	0.0	125.0	140.2	681 751	0.0	76.9	86.8	751
2	68.0	64.5	0.0	76.9	86.8		0.0	0.0	0.0	743
3	66.3	63.0	0.0	0.0 14.9	0.0 24.5	743 751	0.0	14.9	24.5	751
4	64.9	61.9	0.0			743	0.0	0.0	0.0	743
5	63.9	61.3	0.0	0.0 14.9	0.0 24.5	743 751	0.0	14.9	24.5	751
6	63.2 63.0	61.0 60.8	0.0	0.0	0.0	743	0.0	0.0	0.0	743
7 8	63.4	61.4	0.0	14.9	24.5	743 751	0.0	14.9	24.5	751
9	64.7	61.8	0.0	0.0	0.0	751 751	0.0	0.0	0.0	751
10	66.6	62.1	0.0	0.0	0.0	751 751	0.0	0.0	0.0	751
11	69.1	62.9	0.0	0.0	0.0	751	0.0	0.0	0.0	751
12	71.8	63.7	0.0	0.0	0.0	751 751	0.0	0.0	0.0	751
13	74.5	65.5	30.2	0.0	0.0	713	64.1	0.0	0.0	679
14	77.0	67.1	42.8	0.0	0.0	663	89.4	0.0	0.0	583
15	78.9	68.2	44.2	0.0	0.0	612	91.7	0.0	0.0	486
16	80.2	68.6	44.8	0.0	0.0	562	94.7	0.0	0.0	386
17	80.6	68.5	0.0	0.0	0.0	562	0.0	0.0	0.0	386
18	80.4	68.9	0.0	0.0	0.0	562	0.0	0.0	0.0	386
19	79.7	70.0	0.0	0.0	0.0	562	0.0	0.0	0.0	386
20	78.7	71.2	0.0	0.0	0.0	562	0.0	0.0	0.0	386
21	77.3	71.6	0.0	0.0	0.0	562	0.0	0.0	0.0	386
22	75.6	70.5	0.0	0.0	0.0	562	0.0	0.0	0.0	386
23	73.7	69.4	0.0	0.0	0.0	562	0.0	0.0	0.0	386
24	71.8	67.7	0.0	0.0	0.0	562	0.0	0.0	0.0	386
-	-									



---- BUILDING COOLING DEMANDS AND THERMAL STORAGE----

October

			Design						
	Des:	ign	Cooling	Chiller	Chiller	Storage			
	OADB	OAWB	Load	Load	Demand	Capacity			
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)			
1	59.5	50.0	0.0	125.0	140.2	507			
2	58.5	49.3	1.7	125.0	140.2	625			
3	57.7	48.8	0.9	125.0	140.2	743			
4	57.1	48.5	0.0	15.1	24.6	751			
5	56.9	48.3	0.0	0.0	0.0	743			
6	57.3	48.7	0.0	14.9	24.5	751			
7	58.3	49.7	0.0	0.0	0.0	743			
8	60.1	51.3	0.0	14.9	24.5	751			
9	62.7	52.9	0.0	0.0	0.0	751			
10	65.7	54.4	0.0	0.0	0.0	751			
11	69.1	55.5	0.0	0.0	0.0	751			
12	72.3	56.7	0.0	0.0	0.0	751			
13	74.7	57.8	67.3	0.0	0.0	676			
14	76.3	58.6	83.3	0.0	0.0	586			
15	76.9	58.7	86.8	0.0	0.0	493			
16	76.3	58.0	84.2	0.0	0.0	404			
17	74.9	57.0	0.0	0.0	0.0	404			
18	72.7	56.0	0.0	0.0	0.0	404			
19	70.1	55.5	0.0	0.0	0.0	404			
20	67.5	54.7	0.0	0.0	0.0	404			
21	65.3	53.6	0.0	0.0	0.0	404			
22	63.3	52.4	0.0	0.0	0.0	404			
23	61.7	51.5	0.0	0.0	0.0	404			
24	60.5	50.7	0.0	0.0	0.0	404			

				We	ekday		Saturday			
	Туј	pical	Cooling	Chiller	Chiller	Storage	Cooling	Chiller	Chiller	Storage
	OADB	OAWB	Load	Load	Demand	Capacity	Load	Load	Demand	Capacity
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)
1	54.8	51.3	0.0	125.0	140.2	525	0.0	125.0	140.2	616
2	52.9	49.6	0.0	125.0	140.2	645	0.0	125.0	140.2	734
3	51.2	48.2	0.0	112.4	124.6	751	0.0	23.9	39.2	751
4	49.8	47.2	0.0	0.0	0.0	743	0.0	0.0	0.0	743
5	48.8	46.2	2.0	16.9	27.7	751	1.9	16.9	27.6	751
6	48.2	45.7	1.5	0.0	0.0	742	1.5	0.0	0.0	742
7	47.9	45.6	0.0	16.5	27.0	751	0.0	16.4	26.8	751
8	48.5	46.2	0.0	0.0	0.0	743	0.0	0.0	0.0	743
9	50.3	47.3	0.0	0.0	0.0	743	0.0	0.0	0.0	743
10	52.9	48.7	0.0	0.0	0.0	743	0.0	0.0	0.0	743
11	56.2	49.9	0.0	0.0	0.0	743	0.0	0.0	0.0	743
12	59.6	51.5	0.0	0.0	0.0	743	0.0	0.0	0.0	743
13	62.9	53.5	40.3	0.0	0.0	696	16.8	0.0	0.0	719
14	65.5	55.2	57.8	0.0	0.0	631	17.4	0.0	0.0	695
15	67.3	56.3	61.7	0.0	0.0	563	18.5	0.0	0.0	669

Trane Air Conditioning Economics
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				Wo	okday		Saturday			
	Thur	pical			Chiller				Chiller	
	OADB	OAWB	Load	Load			Load	Load	Demand	-
Hour	(F)	(F)	(Ton)			(Ton-Hr)	(Ton)	(Ton)		(Ton-Hr)
nour	(2)	(2)	(1011)	(1011)	(KW)	(ION-HI)	(1011)	(1011)	(// //	(ION-AL)
16	67.9	56.6	61.9	0.0	0.0	496	18.7	0.0	0.0	644
17	67.7	56.4	0.0	0.0	0.0	496	0.0	0.0	0.0	644
18	67.0	56.6	0.0	0.0	0.0	496	0.0	0.0	0.0	644
19	66.0	57.6	0.0	0.0	0.0	496	0.0	0.0	0.0	644
20	64.6	57.9	0.0	0.0	0.0	496	0.0	0.0	0.0	644
21	62.9	57.3	0.0	0.0	0.0	496	0.0	0.0	0.0	644
22	61.0	56.0	0.0	0.0	0.0	496	0.0	0.0	0.0	644
23	59.0	54.8	0.0	0.0	0.0	496	0.0	0.0	0.0	644
24	56.9	53.0	0.0	0.0	0.0	496	0.0	0.0	0.0	644
				s	unday			м	onday	
	Τ'n	pical			Chiller					
	OADB	OAWB	Load	Load	Demand	_	Load	Load	Demand	-
Hour	(F)	(F)	(Ton)		(kW)	(Ton-Hr)			(kW)	(Ton-Hr)
	ζ- ,	ν-,	(/	\/	Ç,	(,	\/	, ,	,	, ,
1	54.8	51.3	0.0	113.6	126.1	751	0.0	113.6	126.1	751
2	52.9	49.6	0.0	0.0	0.0	743	0.0	0.0	0.0	743
3	51.2	48.2	0.0	14.9	24.5	751	0.0	14.9	24.5	751
4	49.8	47.2	0.0	0.0	0.0	743	0.0	0.0	0.0	743
5	48.8	46.2	1.9	16.9	27.6	751	1.9	16.9	27.6	751
6	48.2	45.7	1.5	0.0	0.0	742	1.5	0.0	0.0	742
7	47.9	45.6	0.0	16.4	26.8	751	0.0	16.4	26.8	751
8	48.5	46.2	0.0	0.0	0.0	743	0.0	0.0	0.0	743
9	50.3	47.3	0.0	0.0	0.0	743	0.0	0.0	0.0	743
10	52.9	48.7	0.0	0.0	0.0	743	0.0	0.0	0.0	743
11	56.2	49.9	0.0	0.0	0.0	743	0.0	0.0	0.0	743
12	59.6	51.5	0.0	0.0	0.0	743	0.0	0.0	0.0	743
13	62.9	53.5	16.7	0.0	0.0	719	24.9	0.0	0.0	711
14	65.5	55.2	17.4	0.0	0.0	695	50.7	0.0	0.0	653
15	67.3	56.3	18.5	0.0	0.0	669	58.2	0.0	0.0	589
16	67.9	56.6	18.7	0.0	0.0	644	61.9	0.0	0.0	521
17	67.7	56.4	0.0	0.0	0.0	644	0.0	0.0	0.0	521
18	67.0	56.6	0.0	0.0	0.0	644	0.0	0.0	0.0	521
19	66.0	57.6	0.0	0.0	0.0	644	0.0	0.0	0.0	521
20	64.6	57.9	0.0	0.0	0.0	644	0.0	0.0	0.0	521
21	62.9	57.3	0.0	0.0	0.0	644	0.0	0.0	0.0	521
22	61.0	56.0	0.0	0.0	0.0	644	0.0	0.0	0.0	521
23	59.0	54.8	0.0	0.0	0.0	644	0.0	0.0	0.0	521
24	56.9	53.0	0.0	0.0	0.0	644	0.0	0.0	0.0	521

COLD THERMAL STORAGE - ALTERNATIVE 1 BLDG G101, ECO #13

---- BUILDING COOLING DEMANDS AND THERMAL STORAGE----

November

			Design						
	Des	lgn	Cooling	Chiller	Chiller	Storage			
	OADB	CAWB	Load	Load	Demand	Capacity			
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)			
1	56.0	47.2	0.0	125.0	140.2	641			
2	55.0	46.4	0.0	116.9	130.1	751			
3	54.2	45.8	0.0	0.0	0.0	743			
4	53.6	45.2	0.0	14.9	24.5	751			
5	53.4	45.3	0.0	0.0	0.0	743			
6	53.8	45.9	0.0	14.9	24.5	751			
7	54.8	46.9	0.0	0.0	0.0	743			
8	56.6	48.7	0.0	14.9	24.5	751			
9	59.2	50.6	0.0	0.0	0.0	751			
10	62.2	52.6	0.0	0.0	0.0	751			
11	65.6	54.1	0.0	0.0	0.0	751			
12	68.8	55.3	0.0	0.0	0.0	751			
13	71.2	55.7	0.0	0.0	0.0	743			
14	72.8	56.3	0.0	0.0	0.0	736			
15	73.4	56.2	0.0	0.0	0.0	729			
16	72.8	55.6	0.0	0.0	0.0	721			
17	71.4	54.6	0.0	0.0	0.0	721			
18	69.2	53.6	0.0	0.0	0.0	721			
19	66.6	53.0	0.0	0.0	0.0	721			
20	64.0	51.7	0.0	0.0	0.0	721			
21	61.8	50.7	0.0	0.0	0.0	721			
22	59.8	49.6	0.0	0.0	0.0	721			
23	58.2	48.7	0.0	0.0	0.0	721			
24	57.0	48.0	0.0	0.0	0.0	721			

				We	Weekday			Saturday			
	Ty	pical	Cooling	Chiller	Chiller	Storage	Cooling	Chiller	Chiller	Storage	
	OADB	OAWB	Load	Load	Demand	Capacity	Load	Load	Demand	Capacity	
Hour	(F)	(F)	(Ton)	(Ton)	(KW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)	
1	48.7	45.7	0.0	36.8	54.7	751	0.0	43.9	59.6	751	
2	46.9	44.1	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
3	45.5	42.8	0.0	14.9	24.5	751	0.0	14.9	24.5	751	
4	44.6	41.9	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
5	44.4	42.0	0.0	14.9	24.5	751	0.0	14.9	24.5	751	
6	44.8	42.7	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
7	45.9	43.9	0.0	14.9	24.5	751	0.0	14.9	24.5	751	
8	47.8	46.0	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
9	50.2	48.0	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
10	52.9	49.9	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
11	55.8	51.1	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
12	58.5	52.0	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
13	60.9	52.5	0.0	0.0	0.0	736	0.0	0.0	0.0	736	
14	62.8	53.4	0.0	0.0	0.0	729	0.0	0.0	0.0	729	
15	64.0	53.8	0.0	0.0	0.0	721	0.0	0.0	0.0	721	

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				**-	_1_4_		Saturday			
					-				-	
		pical	-	Chiller		Storage	_	Chiller		Storage
_	OADB	OAWB	Load	Load	Demand	Capacity	Load	Load	Demand	Capacity
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)
16	64.4	53.9	0.0	0.0	0.0	714	0.0	0.0	0.0	714
17	64.1	53.7	0.0	0.0	0.0	714	0.0	0.0	0.0	714
18	63.2	53.7	0.0	0.0	0.0	714	0.0	0.0	0.0	714
19	61.8	54.2	0.0	0.0	0.0	714	0.0	0.0	0.0	714
20	60.0	53.6	0.0	0.0	0.0	714	0.0	0.0	0.0	714
21	57.9	52.7	0.0	0.0	0.0	714	0.0	0.0	0.0	714
22	55.6	51.2	0.0	0.0	0.0	714	0.0	0.0	0.0	714
23	53.2	49.5	0.0	0.0	0.0	714	0.0	0.0	0.0	714
24	50.8	47.6	0.0	0.0	0.0	714	0.0	0.0	0.0	714
				s	undav			M	onday	
	Tvr	oical			-	Storage			Chiller	
	OADB	QAWB	Load	Load	Demand	Capacity	Load	Load	Demand	Capacity
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)
250 42	(- /	(-,	(2011)	(2027)	()	(/	(,	(/	()	, ,
1	48.7	45.7	0.0	43.9	59.6	751	0.0	43.9	59.6	751
2	46.9	44.1	0.0	0.0	0.0	743	0.0	0.0	0.0	743
3	45.5	42.8	0.0	14.9	24.5	751	0.0	14.9	24.5	751
4	44.6	41.9	0.0	0.0	0.0	743	0.0	0.0	0.0	743
5	44.4	42.0	0.0	14.9	24.5	751	0.0	14.9	24.5	751
6	44.8	42.7	0.0	0.0	0.0	743	0.0	0.0	0.0	743
7	45.9	43.9	0.0	14.9	24.5	751	0.0	14.9	24.5	751
8	47.8	46.0	0.0	0.0	0.0	743	0.0	0.0	0.0	743
9	50.2	48.0	0.0	0.0	0.0	743	0.0	0.0	0.0	743
10	52.9	49.9	0.0	0.0	0.0	743	0.0	0.0	0.0	743
11	55.8	51.1	0.0	0.0	0.0	743	0.0	0.0	0.0	743
12	58.5	52.0	0.0	0.0	0.0	743	0.0	0.0	0.0	743
13	60.9	52.5	0.0	0.0	0.0	736	0.0	0.0	0.0	736
14	62.8	53.4	0.0	0.0	0.0	729	0.0	0.0	0.0	729
15	64.0	53.8	0.0	0.0	0.0	721	0.0	0.0	0.0	721
16	64.4	53.9	0.0	0.0	0.0	714	0.0	0.0	0.0	714
17	64.1	53.7	0.0	0.0	0.0	714	0.0	0.0	0.0	714
18	63.2	53.7	0.0	0.0	0.0	714	0.0	0.0	0.0	714
19	61.8	54.2	0.0	0.0	0.0	714	0.0	0.0	0.0	714
20	60.0	53.6	0.0	0.0	0.0	714	0.0	0.0	0.0	714
21	57.9	52.7	0.0	0.0	0.0	714	0.0	0.0	0.0	714
22	55.6	51.2	0.0	0.0	0.0	714	0.0	0.0	0.0	714
23	53.2	49.5	0.0	0.0	0.0	714	0.0	0.0	0.0	714
24	50.8	47.6	0.0	0.0	0.0	714	0.0	0.0	0.0	714

COLD THERMAL STORAGE - ALTERNATIVE 1 BLDG G101, ECO #13

---- BUILDING COOLING DEMANDS AND THERMAL STORAGE----

December

	Design						
	Des:	ign	Cooling	Chiller	Chiller	Storage	
	OADB	OAWB	Load	Load	Demand	Capacity	
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	
1	48.2	40.8	0.0	43.9	59.6	751	
2	47.3	40.2	0.0	0.0	0.0	743	
3	46.6	39.7	0.0	14.9	24.5	751	
4	46.1	39.3	0.0	0.0	0.0	743	
5	45.9	39.4	0.0	14.9	24.5	751	
6	46.3	39.7	0.0	0.0	0.0	743	
7	47.1	40.6	0.0	14.9	24.5	751	
8	48.7	42.0	0.0	0.0	0.0	743	
9	50.9	44.0	0.0	0.0	0.0	743	
10	53.5	46.1	0.0	0.0	0.0	743	
11	56.5	48.0	0.0	0.0	0.0	743	
12	59.2	49.7	0.0	0.0	0.0	743	
13	61.3	50.8	0.0	0.0	0.0	736	
14	62.7	51.4	0.0	0.0	0.0	729	
15	63.2	51.4	0.0	0.0	0.0	721	
16	62.7	50.7	0.0	0.0	0.0	714	
17	61.5	49.7	0.0	0.0	0.0	714	
18	59.6	48.5	0.0	0.0	0.0	714	
19	57.3	47.6	0.0	0.0	0.0	714	
20	55.1	45.9	0.0	0.0	0.0	714	
21	53.2	44.6	0.0	0.0	0.0	714	
22	51.5	43.1	0.0	0.0	0.0	714	
23	50.1	42.2	0.0	0.0	0.0	714	
24	49.0	41.5	0.0	0.0	0.0	714	

	Weekday							Saturday			
	Ту	pical	Cooling	Chiller	Chiller	Storage	Cooling	Chiller	Chiller	Storage	
	OADB	OAWB	Load	Load	Demand	Capacity	Load	Load	Demand	Capacity	
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)	
1	37.5	35.3	0.0	43.9	59.6	751	0.0	43.9	59.6	751	
2	37.1	35.1	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
3	37.4	35.5	0.0	14.9	24.5	751	0.0	14.9	24.5	751	
4	38.1	36.2	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
5	39.3	37.6	0.0	14.9	24.5	751	0.0	14.9	24.5	751	
6	40.9	39.2	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
7	42.7	41.2	0.0	14.9	24.5	751	0.0	14.9	24.5	751	
8	44.7	43.1	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
9	46.8	45.3	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
10	48.8	47.0	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
11	50.7	48.1	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
12	52.2	48.8	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
13	53.4	49.2	0.0	0.0	0.0	736	0.0	0.0	0.0	736	
14	54.1	49.2	0.0	0.0	0.0	729	0.0	0.0	0.0	729	
15	54.4	48.9	0.0	0.0	0.0	721	0.0	0.0	0.0	721	

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			Cooling Chiller Chiller Storage				Saturday				
	Typical		-					Chiller		•	
	OADB	OAWB	Load	Load		Capacity		Load	Demand		
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)	
16	54.0	48.2	0.0	0.0	0.0	714	0.0	0.0	0.0	714	
17	53.0	47.3	0.0	0.0	0.0	714	0.0	0.0	0.0	714	
18	51.4	46.3	0.0	0.0	0.0	714	0.0	0.0	0.0	714	
19	49.3	45.4	0.0	0.0	0.0	714	0.0	0.0	0.0	714	
20	47.0	43.5	0.0	0.0	0.0	714	0.0	0.0	0.0	714	
21	44.5	41.5	0.0	0.0	0.0	714	0.0	0.0	0.0	714	
22	42.2	39.3	0.0	0.0	0.0	714	0.0	0.0	0.0	714	
23	40.1	37.6	0.0	0.0	0.0	714	0.0	0.0	0.0	714	
24	38.5	36.2	0.0	0.0	0.0	714	0.0	0.0	0.0	714	
		Sunday						Monday			
	Typical					Storage	Cooling	Chiller	Chiller	Storage	
	OADB	OAWB	Load	Load	Demand	Capacity	Load	Load	Demand	Capacity	
Hour	(F)	(F)	(Ton)	(Ton)	(kW)	(Ton-Hr)	(Ton)	(Ton)	(kW)	(Ton-Hr)	
1	37.5	35.3	0.0	43.9	59.6	751	0.0	43.9	59.6	751	
2	37.1	35.1	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
3	37.4	35.5	0.0	14.9	24.5	751	0.0	14.9	24.5	751	
4	38.1	36.2	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
5	39.3	37.6	0.0	14.9	24.5	751	0.0	14.9	24.5	751	
6	40.9	39.2	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
7	42.7	41.2	0.0	14.9	24.5	751	0.0	14.9	24.5	751	
8	44.7	43.1	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
9	46.8	45.3	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
10	48.8	47.0	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
11	50.7	48.1	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
12	52.2	48.8	0.0	0.0	0.0	743	0.0	0.0	0.0	743	
13	53.4	49.2	0.0	0.0	0.0	736	0.0	0.0	0.0	736	
14	54.1	49.2	0.0	0.0	0.0	729	0.0	0.0	0.0	729	
15	54.4	48.9	0.0	0.0	0.0	721	0.0	0.0	0.0	721	
16	54.0	48.2	0.0	0.0	0.0	714	0.0	0.0	0.0	714	
17	53.0	47.3	0.0	0.0	0.0	714	0.0	0.0	0.0	714	
18	51.4	46.3	0.0	0.0	0.0	714	0.0	0.0	0.0	714	
19	49.3	45.4	0.0	0.0	0.0	714	0.0	0.0	0.0	714	
20	47.0	43.5	0.0	0.0	0.0	714	0.0	0.0	0.0	714	
21	44.5	41.5	0.0	0.0	0.0	714	0.0	0.0	0.0	714	
22	42.2	39.3	0.0	0.0	0.0	714	0.0	0.0	0.0	714	
23	40.1	37.6	0.0	0.0	0.0	714	0.0	0.0	0.0	714	
24	38.5	36.2	0.0	0.0	0.0	714	0.0	0.0	0.0	714	

CALIFORNIA TITLE 24 COMPLIANCE - ALTERNATIVE 1

BLDG G101, ECO #13

-----ENERGY USE SUMMARY

	ELEC (kWh/yr)	GAS (kBtu/yr)	WATER (1000 gal)	PERCENT OF TOTAL ENERGY (%)	TOTAL SOURCE ENERGY (kBtu/yr)	ADJUSTED UNIT SOURCE ENERGY (kBtu/yr-sf)
Primary Heating	9,266.2	633,624.6	5.1	8.5	761,859.0	6.5
Primary Cooling						
Compressor	330,325.6	0.0	0.0	14.5	3,382,541.8	28.8
Tower/Cond Fans	25,471.3	0.0	0.0	1.1	260,826.2	2.2
Condenser Pump	0.0	0.0	0.0	0.0	0.0	0.0
Other Accessories	6,906.9	0.0	0.0	0.3	70,726.8	0.6
Auxiliary						
Supply Fans	416,647.3	0.0	0.0	18.2	4,266,477.5	36.4
Circulation Pumps	142,592.0	0.0	0.0	6.2	1,460,145.0	12.5
Base Utilities	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	559,239.2	0.0	0.0	24.5	5,726,622.5	48.8
Lighting	729,764.0	0.0	0.0	31.9	7,472,800.5	62.2
Receptacle	439,233.8	0.0	0.0	19.2	4,497,765.0	37.4
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration	0.0	0.0	0.0	0.0	0.0	0.0
Totals	2,100,206.8	633,624.6	5.1	100.0	22,173,140.0	186.6

MONTHLY ENERGY CONSUMPTION - ALTERNATIVE 1

BLDG G101, ECO #15

------ MONTHLY ENERGY CONSUMPTION -----

	ELEC On Peak	DEMAND On Peak	GAS On Peak	WATER	GAS DMND On Peak
Month	(kWh)	(kW)	(Therm)	(1000 Gl)	(Thrm/hr)
Jan	135,443	335	1,875	1	9
Feb	123,834	335	1,817	1	9
March	132,657	335	455	0	5
April	119,262	335	8	0	2
May	183,212	571	0	0	0
June	208,984	643	0	0	0
July	205,681	631	0	0	0
Aug	213,267	634	0	0	0
Sept	182,522	597	0	0	0
Oct	157,871	506	0	0	0
Nov	122,315	335	272	0	4
Dec	130,746	335	1,226	1	6
Total	1,915,794	643	5,653	3	9

Building Energy Consumption = 59,110 (Btu/Sq Ft/Year)
Source Energy Consumption = 168,186 (Btu/Sq Ft/Year)

Floor Area = 120,182 (Sq Ft)

EQUIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1 BLDG G101, ECO #15

----- EQUIPMENT ENERGY CONSUMPTION -----

Ref	Equip -			 -		Mon		sumption						
um	Code	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
0	LIGHTS													
	ELEC	51699	46725	53507	49740	52603	51547	50796	53507	49740	52603	49740	50796	613,004
	PK	139.6	139.6	139.6	139.6	139.6	139.6	139.6	139.6	139.6	139.6	139.6	139.6	139.6
1	MISC LD													
	ELEC	36778	33261	39395	35169	38086	37787	35469	39395	35169	38086	35169	35469	439,234
	PK	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6	147.6
2	MISC LD													
	GAS	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3										_			_	
	OIL	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	MISC LD						_			_	_	_	•	
	P STEAM	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	MISC LD	_	_	_		_			_		0	0	0	0
	P HOTH20	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	MISC LD	0	0	0	0	0	0	0	0	0	0	0	0	0
	P CHILL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	•••
1	-	0	AIR O	-CLD REC	IP 20-35 0	TONS 5070	8988	8807	8930	6044	1807	o	0	39,645
	ELEC PK	0.0	0.0	0.0	0.0	32.5	39.7	38.2	38.3	32.1	18.7	0.0	0.0	39.7
		0.0				32.3	55	3012	3013					
1	-			DENSER F.									_	4 000
	ELEC	0	0	0	0	611	1138	1123	1130	745	173	0	0	4,920
	PK	0.0	0.0	0.0	0.0	3.6	4.4	4.3	4.3	3.8	2.7	0.0	0.0	4.4
1	-			LLED WAT		c.v.						_		
	ELEC	0	0	0	0	4008	5256	5431	5431	4599	1409	0	0	26,134
	PK	0.0	0.0	0.0	0.0	7.3	7.3	7.3	7.3	7.3	7.3	0.0	0.0	7.3
1	_			TROLS								_		
	ELEC	0	0	0	0	165	216	223	223	189	58	0	0	1,074
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
2	EQ11208			-CLD REC								_		
	ELEC	0	0	0	0	3021	4885	4837	4981	3476	1545	0	0	22,744
	PK	0.0	0.0	0.0	0.0	17.8	21.3	20.9	21.1	17.9	11.2	0.0	0.0	21.3

Trane Air Conditioning Economics
By: Trane Customer Direct Service Network

V 600 PAGE

EQUIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1 BLDG G101, ECO #15

2	EQ5200		CON	DENSER F	ANS									
	ELEC	0	0	0	0	363	617	614	627	428	145	0	0	2,793
	PK	0.0	0.0	0.0	0.0	2.0	2.4	2.4	2.4	2.1	1.6	0.0	0.0	2.4
2	EQ5001		CHI	LLED WAT	ER PUMP (v.								
	ELEC	0	0	0	0	1569	1656	1711	1711	1656	646	0	0	8,949
	PK	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3	0.0	0.0	2.3
2	EQ5313		CON	TROLS										
	ELEC	0	0	0	0	205	216	223	223	216	84	0	0	1,167
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
3	EQ1171L		AIR	-CLD CON	D COMP 35	5-60 TON	S							
	ELEC	0	0	0	0	5732	10401	10302	10297	6763	1612	0	0	45,108
	PK	0.0	0.0	0.0	0.0	33.9	41.4	40.1	40.1	35.5	23.2	0.0	0.0	41.4
3	EQ5200		CON	DENSER F	ANS									
	ELEC	0	0	0	0	694	1300	1306	1290	837	157	0	0	5,585
	PK	0.0	0.0	0.0	0.0	4.1	4.9	4.8	4.8	4.3	3.1	0.0	0.0	4.9
3	EQ5313		CON	TROLS										
	ELEC	0	0	0	0	163	216	223	223	180	60	0	0	1,066
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
4	EQ1122L		AIR	-CLD REC	IP >55 TO									
	ELEC	0	0	0	0	17622	31290	29638	30267	20408	10002	0	0	139,227
	PK	0.0	0.0	0.0	0.0	110.9	145.1	136.9	139.7	120.1	70.1	0.0	0.0	145.1
4	EQ5200		CON	DENSER F	ANS									
	ELEC	0	0	0	0	1992	3818	3671	3724	2418	828	0	0	16,4
	PK	0.0	0.0	0.0	0.0	13.4	17.3	16.4	16.7	14.6	9.7	0.0	0.0	17.5
4	EQ5001		CHI	LLED WAT	ER PUMP (
	ELEC	0	0	0	0	15698	15192	15698	15698	15192	13082	0	0	90,561
	PK	0.0	0.0	0.0	0.0	21.1	21.1	21.1	21.1	21.1	21.1	0.0	0.0	21.1
4	EQ5313			TROLS										
	ELEC	0	0	0	0	223	216	223	223	216	186	0	0	1,288
	PK	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
1	EQ4003		FC	CENTRIF.	FAN C.V.									
	ELEC	16899	15264	16899	16354	16899	16354	16899	16899	16354	16899	16354	16899	198,974
	PK	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7
2	EQ4003				FAN C.V.									
	ELEC	1797	1623	1797	1739	1797	173 9	1797	1797	1739	1797	1739	1797	21,155
	PK	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
3	EQ4371				PPLY FAN			_						
	ELEC	2658	2401	2658	2572	2658	2572	2658	2658	2572	2658	2572	2658	31,294 3.6
	PK	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
4	EQ4371		FAN	COIL SU	PPLY FAN									

EQUIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1 BLDG G101, ECO #15

BLDG	G101, ECO	#15												
	ELEC	6895	6228	6895	6672	6895	6672	6895	6895	6672	6895	6672	6895	81,182
	PK	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
5	EQ4003		FC C	ENTRIF.	FAN C.V.									
	ELEC	7138	6447	7138	6908	7138	6908	7138	7138	6908	7138	6908	7138	84,042
	PK	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
1	EQ2001		GAS	FIRE TUB	E HOT WA	TER								
	GAS	973	1041	301	8	0	0	0	0	0	0	192	729	3,243
	PK	6.0	5.7	2.8	2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	3.3	6.0
1	EQ5020		HEAT	WATER C		IP C.V.								
	ELEC	8187	8567	3186	84	0	0	0	0	0	0	2258	6436	28,717
	PK	21.1	21.1	21.1	21.1	0.0	0.0	0.0	0.0	0.0	0.0	21.1	21.1	21.1
1	EQ5240		BOII	ER FORCE	D DRAFT	FAN								
	ELEC	2037	2131	793	21	0	0	0	0	0	0	562	1601	7,145
	PK	5.3	5.3	5.3	5.3	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	5.3
1	EQ5307		BOII	ER CONTE										
	ELEC	194	203	76	2	0	0	0	0	0	0	53	152	681
	PK	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
2	EQ2002			FIRE TUE							_		405	2 442
	GAS	902	776	155	0	0	0	0	0	0	0	80	497	2,410
	PK	4.4	4.4	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	3.6	4.4
2	EQ5020			WATER O										
	ELEC	782	662	212	0	0	0	0	0	0	0	193	609	2,459
	PK	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3
2	EQ5240			ER FORCE										
	ELEC	200	170	54	0	0	0	0	0	0	0	50	156	630
	PK	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6
2	EQ5307			ER CONTE					_	_	_	40	455	535
	ELEC	170	144	46	0	0	0	0	0	0	0	42	133	535 0.5
	PK	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
2	EQ5061	_			RETURN P		_	•		•	0	2	7	30
	ELEC	9	8	3	0	0	0	0	0	0	0.0	0.0	0.0	0.0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	EQ5406			E-UP WATE		_	_	_	_	•		•	•	3
	WATER	1	1	0	0	0	0	0	0	0	0	0	1	3 0.0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

V 600 PAGE

UTILITY PEAK CHECKSUMS - ALTERNATIVE 1 BLDG G101, ECO #15

Utility ELECTRIC DEMAND

Peak Value 642.9 (kW)
Yearly Time of Peak 15 (hr) 6 (mo)

Hour 15 Month 6

Eqp. Ref. Num. Cooling E	Equipment Code Name	Equipment Description	Utility Demand (kW)	Percnt Of Tot (%)
1	EQ1121S	AIR-CLD RECIP 20-35 TONS	51.6	
2	EQ1120S	AIR-CLD RECIP <20 TONS	26.3	4.09
3	EQ1171L	AIR-CLD COND COMP 35-60 TONS	46.6	7.24
4	EQ1122L	AIR-CLD RECIP >55 TONS	183.8	28.59
Sub Total			308.3	47.95
Sub Total			0.0	0.00
Air Movin	g Equipment			
1		SUMMATION OF FAN ELECTRICAL DEMAND	22.7	3.53
2		SUMMATION OF FAN ELECTRICAL DEMAND	2.4	0.38
3		SUMMATION OF FAN ELECTRICAL DEMAND	3.6	0.56
4		SUMMATION OF FAN ELECTRICAL DEMAND	9.3	1.44
5		SUMMATION OF FAN ELECTRICAL DEMAND	9.6	1.49
Sub Total			47.6	7.40
Sub Total			0.0	0.00
Miscellan	eous	•		
Lights			139.6	21.71
Base Uti	lities			0.00
Misc Equ	•		147.6	
Sub Total			287.1	44.66
Grand Tota	al		642.9	100.00

CALIFORNIA TITLE 24 COMPLIANCE - ALTERNATIVE 1

BLDG G101, ECO #15

 Weather Name
 ATLANTA.

 Gross Conditioned Floor Area (sqft)
 120,182

 ACM Multiplier
 1.025

----- ENERGY USE SUMMARY

	ELEC (kWh/yr)	GAS (kBtu/yr)	WATER (1000 gal)	PERCENT OF TOTAL ENERGY (%)	TOTAL SOURCE ENERGY (kBtu/yr)	ADJUSTED UNIT SOURCE ENERGY (kBtu/yr-sf)
Primary Heating	9,020.2	565,330.4	3.3	8.4	687,451.2	5.9
Primary Cooling						
Compressor	246,723.9	0.0	0.0	11.9	2,526,459.0	21.5
Tower/Cond Fans	29,749.0	0.0	0.0	1.4	304,630.8	2.6
Condenser Pump	0.0	0.0	0.0	0.0	0.0	0.0
Other Accessories	4,594.5	0.0	0.0	0.2	47,047.8	0.4
Auxiliary						
Supply Fans	416,647.3	0.0	0.0	20.0	4,266,477.5	36.4
Circulation Pumps	156,820.4	0.0	0.0	7.5	1,605,844.5	13.7
Base Utilities	0.0	0.0	0.0	0.0	0.0	0.0
Subtotal	573,467.6	0.0	0.0	27.6	5,872,322.0	50.1
Lighting	613,004.4	0.0	0.0	29.5	6,277,180.0	52.2
Receptacle	439,233.8	0.0	0.0	21.1	4,497,765.0	37.4
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0	0.0
Cogeneration	0.0	0.0	0.0	0.0	0.0	0.0
Totals	1,915,793.6	565,330.4	3.3	100.0	20,212,856.0	170.1

BUILDING 207

E M C ENGINEERS, INC.

PROJECT: FORT McPHERSON & FORT GILLEM ESOS STUDY LOCATION: FORT McPHERSON ECO: Computer Simulation Summary

G207ECO DENNIS JONES 04/21/92 #3105.000

FILE: PREPARED BY:

CHECKED BY:

EMC PROJECT: DATE:

CLIENT CONTRACT NO: DACA21-91-C-0097 CLIENT PROJECT ENG: TERRY SEABROOK

Heating Heating Heating		Fan		Linhting	togood	Total	Deak		
Gas Ele Scription (kBtu/yr) (kW 6,317,652 6,317,652 6,241,559 Savings (Loss) 76,093	ш Э				יוספספט.				
Run Use C. Lise C. Lis		Flantin	Flactric	Flactric	Electric	Electric	Electric	Gas	Energy
Company Comp	•		;	i	の動物に対象を行		•		
scription (KBtu/yr) (KM 6,317,652 6,241,559 Savings (Loss) 76,093	•		ີ (1) Ω	nse	eso	es O	Demand		eso Ose
6,317,652 6,241,559 Savings (Loss) 76,093	Wh/vr) (KWh/vr)	(KWh/yr)	(kWh/yr)	(kWh/yr)	(kWh/yr)	(kWh/yr)	(kW)	(MBtu/yr)	(MBtu/yr)
6,241,559 Savings (Loss) 76,093	0		0	295,749	0	459,169	0	6,318	7,885
6,241,559 Savings (Loss) 76,093									
Savings (Loss)	8,200 0	152,300	0	295,749	0	456,249	0	6,242	7,799
	0	2.920	0	0	0	2,920	0	76	88
2.208.442	6.937		0	295,749	0	350,629	0	2,208	3,405
Savings (Loss) 4.109,210	1,263	107,277	0	0	0	108,540	0		4,480
	8,200 0	154,555	0	295,749	0	458,504	0	6,5	7,852
Savings (Loss) 30,150	0	999	0	0	0	665	0		32
6,310,442	8,200 0	155,042	0	295,749	0	458,991	0	6,310	7,877
(SSO	0	178	0	0	0	178	0	7	80
5 806.827	7.984 0	219,168	0	295,749	0	522,901	0	2'802	7,591
vinds (Loss) 510 825			0	0	0	(63,732)	0	511	293
6.010,785	7.794 0		0	295,749	0	303,543	0	6,011	7,047
Savings (Loss) 306,867	406	155,220	0	0	0	155,626	0	307	838
5.981,313	8,085 0	146,557	0	295,749	0	450,391	0	5,981	7,518
Savinos (Loss) 336,339	115	8,663	0	0	0	8,778	0	336	366
6.532.542	8,239 0	149,773	0	159,705	0	317,717	0	6,533	7,617
Savings (Loss) (214,890)	(39)	5,447	0	136,044	0	141,452	0	(215)	268
8.905,955	11.988 0	23	0	295,749	0	540,567	0	906'8	10,751
oss) (2.588,303)	(3.788)	(77,610)	0	0	0	(81,398)	0	(2,588)	(2,866)

E M C ENGINEERS, INC.

Denver • Colorado Springs • Atlanta • West Germany

JOB	
SHEET NO.	OF
CALCULATED BY	DATE
CHECKED BY	DATE
SCALE	

ROOF & MALL INSULATION (ECO-1)

ADD 0-10 TO MALL DRIVIT"
R-15,46 [U=0.065]

A33 R-19 BATTS TO POST R = 20.93 U = 0.048

MSWATED GLASS ECOTO LOWER LEVEL

SC = 0.58 1 U = 0.51

WEATHER STO 12 MG & MOUR (ECO-3)

5 DECIF C INFICTRATION IS 1.53 m/in²

EXIST NEW EXIST NEW

(12) 24 DOORS 10'11' 2.320 0.215 646 434

1952 11² SLASS 0.052 0.026 155 78

11 NINSON FRAME 0.093 0.019 278 57

1320 11² DOOR 1. 0.093 0.019 188 38

1267 607

SAUE 560 Mm

D 2,988,000 A3 = 0.0133 reh NEW 1.0 - 0.0133 = 0.987 ACH

Ε	М	C	ENGINEERS	S. INC.
-		•		-, .

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JOB	
SHEET NO.	OF
CALCULATED BY	_ DATE
CHECKED BY	DATE
15707	

	SCALE 23 2 2 7
ECOO	
	TERATION FANS (ECO-10) V
	MEASURED S8° AT CEILING
	65.000 AT FLOOR
	DROP JUER ZONE FROM: 68'F TO 654
RADIANT	HENTERS (SCO-14)
	SEPARATE CALCULATION
JADING	DOCK SEALS (ECO-14)
	ASSUME 5 TRATS AT BLOG
	DOURS 10'WXII'H -> PERIM = 44/12
	ASSIME 6" CLACK WITH TRICK -> 22/12/0008
	TOTAL LEA'S AKEA = 110 /12 = 15,840 in = = L
	D= L MOX + 892
	11 mg/ - 0.0143 3 5-014 - 5HIECOING CLASS 3
	65-52 = 13°=
	- 0.0471 3 575R4
	$Q = L \times 1.53 \text{ efg/in}^2 = 24,244 \text{ efg}$ $VOCUME = 20' \times 844' \times 177' = 2,988,000 \text{ M}^3$
	VOCUME = 20' x 844'x 177' = 2,988,000 M3
L164+ 96	CONTROLS (ECO-15) V

24 HR BUILER OPERATION ECO-17)

AIR STRATIFICATION

ECO 10

LOCATION NORTHEND	REQ. TEMP.
TEMP. AT TSTAT	SOURCE UNIT HEATER
TEMP. AT CEILING 68 F	OPP. HOURS TO
TEMP. AT FLOOR 65.4 F	T'STAT GAS FIRE
SKETCH ROOM – DIMENSIONS, T-STATS, DUCTS, FANS	, EIC.
01H. 68°F	DUI+ @ 25'

COMMENTS:	BAY 7	

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JOB	
SHEET NO.	OF
CALCULATED BY	DATE
CHECKED BY	DATE
,,,,,,,	

		SCALE	
TEACE 500	1/1/227		
	6 / A	€8°F	
PORE-1		-	
Dore-1	20, 20,	P 1101	USE 24' AVG HE164T
		6-7-	
BOOF			
8001		OUTER FILM	0.25
		&U ROOFING	0,33
		1" GYP FIBER CONC	0.60
		INNER FILM	0,75
			1,93
			U= 0.518
NACCS			
	47	OUTER FILM 12" BRICK	0.25
		INNER THM	0.75
	1		5.44
			U= 0.184
		843.5,0	
		8 43, 5	7
			77'
		<u>()</u>	
		(2)	

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JOB ____ CALCULATED BY _____ DATE __

Lanta WILLDOWS

SINGLE IANE - METAL FRAME U= 1,23

CLEARSTORY WINGONS

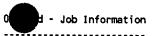
GREEN CORNUGATED FIRENSCASS OVER CLEAR GLASS DOUBLE GLAZEN

U= 0.49

Z' V 847, 5' 1101774 & 500 TH

616475

(46) & 12 CMP FLUORESCENTS PER BAY (7) @ 210 WATTS 46×7×210/1000 = 67.6 AW



Project: FORT MCPHERSON & GILLEM EEAP #3105.000

Location: ATLANTA, GA

Client: COE - DACA21-9-C-0097 Program User: DENNIS JONES

Comments: BUILDING 207 - FORT GILLEM - BASELINE

Weather Code ATLANTA	Summer Clearness Number	Winter Clearness Number		Summer Design Wet Bulb	Winter Design Dry Bulb	Building Orientation	Summer Ground Reflect	Winter Ground Reflect
		Load Sec	tion Alte	rnative #1				

---- Load Alternative ----

Number

Description

G207 - BASELINE

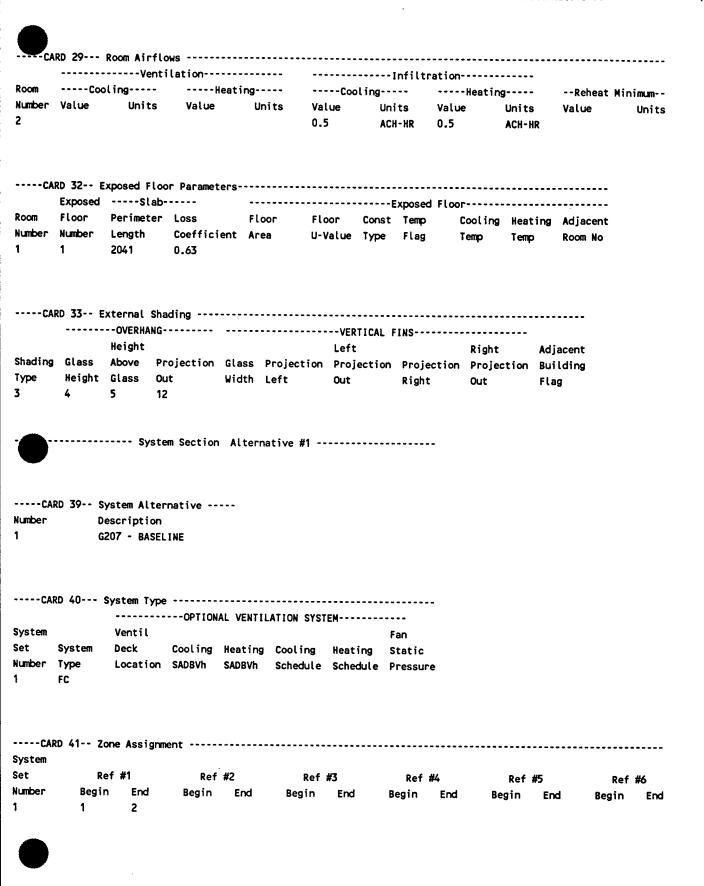


CA	RD 20 Ger	neral Room Parameters		• • • • • • • • • • • • • • • • • • • •							
	Zone						Acoustic	Floor to	Duplicate	Duplicate	Perimeter
Room	Reference	Room	Floor	Floor	Const	Plenum	Ceiling	Floor	Floors	Rooms per	Depth
Number	Number	Descrip	Length	Width	Type	Height	Resistance	Height	Multiplier	Zone	•
1	1	LOWER LEVEL	843.5	177	2	0		14			
2	2	UPPER LEVEL	843.5	177	1	0		7			

CA	RD 21 The	rmostat	Parameters -							
	Cooling	Room	Cooling	Cooling	Heating	Heating	Heating	T'stat	Mass /	Carpet
Room	Room	Design	T'stat	Tistat	Room	T'stat	T'stat	Location	No. Hrs	0n
Number	Design DB	RH	Driftpoint	Schedule	Design DB	Driftpoint	Schedule	Flag	Average	Floor
1					65		HTG65			NO
2					65		HTG68			NO

Room Roof Equal to Roof Roof Roof Const Roof Roof Roof Number Number Floor? Length Width U-Value Type Direction Tilt Alpha 2 1 YES 0.518 47 0 90 0.45

					Wall				Ground				
Room	Wall	Wall	Wall	Wall	Constuc	Wall	Wall	Wall	Reflecta	nce			
lumber	Number	Length	Height	U-Value	Type	Direction	Tilt	Alpha	Multipli	er			
1	1	177	14	0.184	72	0		0.68					
	2	843.5	14	0.184	72	90		0.68					
	3	177.5	14	0.184	72	180		0.68					
	4	843.5	14	0.184	72	270		0.68					
	1	843.5	6	0.184	72	270		0.68					
·	2	843.5	6	0.184	72	90		0.68					
2	3	177	10	0.184	72	0		0.68					
2	4	177	10	0.184	72	180		0.68					
	25												
	4KD 23	wall/Glas	ss Paramet	ers Pct Glas									
OOM	Wall	Glass	Glass		of Glass	Shading		xternal hading	Shading	l Percent	Visible		Inside
lumber	Number	Length	Width	Windows		Snading Coeffici		_	Type		Transm		Visible Reflectan
	1	704	1	1	1.2	1	I	/he	1 ype	KEL. AT	ा वा आ	. c.a.ce	AC: LECTAL
	2	272	1	1	1.2	1							
	3	704	1	1	1.2	1.00							
	4	272	1	1	1.2	1.00	3	;					
	1	844	6	1	0.49	0.20	_						
	2	844	6	1	0.49	0.20							
CA com		Schedules Lights		lation I	nfiltratio	Reheat	Coo	ling	 Heating Fan	Auxiliary Fan		Dayligh Control	_
1	PPL1	LGT1			VAIL		4TO		4T08	, di i	ON	CONTROL	•
CA	ARD 27	People ar	nd Lights		•••••				•••••				-
							Light	ing	Pe	rcent	- Dayligh	iting	-
oom	-	People	People	-	Lighting	Lighting	Fixtu	re Ba	llast Li	ghts to Re	ference	Reference	•
umber	Value	Units		Latent	Value	Units	Type	Fac	ctor Re	t. Air Po	int 1	Point 2	
	30	PEOPLE	250	200									
					106807	WATTS	SUSFL	UOR 1					
CA	RD 29	Room Air	flows										••
CA			flows ntilation								*******		· -
CA			ntilation				In	filtrati			Reheat	: Minimum	·•
oom		Ve	ntilation	 Heating			In	filtrati 	ion		Reheat	: Minimum: Uni	



Elec Consump Elec Demand Demand

Schedule

Alternative Time of Day Time of Day Limit

Schedule

Number

```
-----CARD 42--- Fan SP and Duct Parameters-----
System Cool Heat Return Mn Exh Aux Rm Exh Cool
                                            Return Supply Supply Return
Set
      Fan
               Fan
                     Fan
                               Fan
                           Fan
                                     Fan Mtr Fan Mtr Duct
                                                         Duct
                                                               Air
Number SP
          SP
               SP
                     SP
                           SP
                               SP
                                     Loc
                                            Loc
                                                   Ht Gn Loc
                                                               Path
      0.3 0.3
-----CARD 43-- Airflow Design Temperatures ------
System Minimum Maximum Minimum Maximum Minimum Maximum Minimum Maximum Minimum Design
      Cooling Cooling Heating Cooling Cooling Preheat Preheat Room
                                                                   Ht Rec
Number SADB
             SADB
                   SADB
                          SADB
                                 LV DB LV DB
                                              Lv DB
                                                     Lv DB
                                                            RH
                                                                   Diff
1
                   130
                          130
-----CARD 44-- System Options ------
             Econ Max Pct Direct Indirect 1st Stage
System Econ
                                                Fan --- Exhaust Air Heat Recovery -------

Fan --- Effectiveness --- Control Method ---
Set
      Type
             0n
                  Outside Evap
                                Evap
                                       Evap
             Point Air Cooling Cooling Cooling Cycling System
Number Flag
                                                                Room
                                                                        System
                                                                                    Room
      NONE
-----CARD 45--- Equipment Schedules ------
System Main
                      Direct
                              Indirect Auxiliary Main
                                                     Main
                                                                            Auxiliary
Set
      Cooling
                      Evap
                              Evap
                                     Cooling
                                             Heating Preheat Reheat
                                                                    Mech.
                                                                            Heating
Number Coil
             Economizer Coil
                              Coil
                                     Coil
                                             Coil
                                                     Coil
                                                            Coil
                                                                    Humidity Coil
     OFF
             OFF
                                             4T08
-----CARD 46--- EMS/BAS Schedules ------
System Discrim Night
                     Optimum Optimum ------DUTY CYCLING----- System HR Room HR
     Control
             Purge
                     Start
                            Stop
                                    On Period Pattern Maximum Exhaust
Number Schedule Schedule Schedule Schedule Length Off Time Schedule Schedule
-----CARD 49-- Heating Capacity Overrides -----
System ---MAIN HEATING--- ----PREHEAT----- ----REHEAT----- --HUMIDIFICATION-- ---AUX HEATING----
     Capacity Capacity Capacity Capacity Capacity Capacity Capacity Capacity Capacity
Set
Number Value
             Units
                    Value
                            Units
                                   Value
                                           Units
                                                  Value
                                                          Units
                                                                  Value
                                                                         Units
     3000
             MBH
----- Equipment Section Alternative #1 ------ Equipment Section
-----CARD 59-- Equipment Description / TOD Schedules -----
```

Max KW Alternative Description

C/	ARD 65 H	leating L	oad Ass	ignment	• • • • • •										
Load	All	Coil													
Assign	ment Load	ls To	-Group	1Gr	oup 2-	-Gro	up 3	Group 4-	-Group 5-	-Group	6Grou	р 7-	-Group	8Gr	oup 9-
Refere	nce Heat	ing Ref	Begin	End Beg	in End	Begi	n End B	Begin End	Begin End	Begin E	nd Begin	End	Begin E	nd Beg	in End
1	1		_	1											
C/	ARD 67 H	eating E	quipmen	t Parame	ters										
Heat	Equip	Number	HW Pm	p				Energy		Seq	Switch				Demand
Ref	Code	Of	Full	Ld	C	ap'y		Rate		Order	over	Hot	Misc.		Limit
Number	Name	Units	Value	Unit	s V	alue	Units	Value	Units	Number	Control	Strg	Acc.	Cogen	Number
1	EQ2001	1	1.5	HP	3	000	MBH	80	PCTEFF						
C/	ARD 69 F	an Equip	ment Pa	rameters											
System															
Set	Cooli	ng Hea	ting	Return	Exhau	st	Auxiliar	y Room	Optiona (ι					
Number	Fan	Fan		Fan	Fan	;	Supply	Exhaust	Ventila	tion					
1	EQ400	3 EQ4	003												

Utility Description Reference Table

EQ4003

```
Schedules:
     4T08
     4T08
              (Utility file not found)
    AVAIL AVAILABLE (100%)
     HTG65
              (Utility file not found)
    HTG68 HEATING ONLY (T-STAT AT 68)
    LGT1
    OFF ALWAYS OFF
    ON AVAILABLE (100%)
    PPL1
System:
    FC FAN COIL
    Heating:
         EQ2001 GAS FIRE TUBE HOT WATER
    Fan:
```

(Utility file not found)

Schedule Name: 4T08

Project: Location: Client:

Program User:

Comments: NOV THRU APRIL - 4 AM TO 8 PM

Starting Month: NOV Ending Month: APR

Starting Day Type: DSGN Ending Day Type: SUN

Hour	Util	Percent
0		0
4	•	100
20		0

24

le Name: AVAIL
Project: AVAILABLE (100)

Location: Client:

Program User: Comments:

Starting Month: JAN Ending Month: HTG

Starting Day Type: DSGN Ending Day Type: SUN

Hour Util Percent

100

0 24

```
Schedule Name: HTG68
```

Project: HEATING ONLY (T-STAT AT 68)

Location: Client:

Program User:

Comments: HEATING ONLY SCHEDULE - T-STAT

Starting Month: JAN Ending Month: MAY

Starting Day Type: DSGN Ending Day Type: SUN

Hour Temperature
0 68
24

Starting Month: JUN Ending Month: SEP

Starting Day Type: DSGN Ending Day Type: SUN

Hour Temperature

0 35
24

Starting Month: OCT | Ending Month: DEC

Starting Day Type: DSGN Ending Day Type: SUN

Hour Temperature
0 68
24

dule Name: LGT1

Project: Location: Client:

Program User:

Comments: OFFICE LIGHTING

Starting Month: JAN Ending Month: DEC

Starting Day Type: DSGN Ending Day Type: WKDY

Hour	Util Percent
0	5
7	80
8	100
12	80
13	100
16	80
17	40
18	5
24	

Starting Month: JAN Ending Month: DEC Starting Day Type: SAT Ending Day Type: SUN

Util Percent

0 5
24

Schedule Name: OFF Project: ALWAYS OFF

Location: Client: Program User: Comments:

Starting Month: JAN Ending Month: HTG

Starting Day Type: DSGN Ending Day Type: SUN

Hour Util Percent
0 0
24

e Name: ON

Project: AVAILABLE (100)

Location: Client:

Program User:

Comments:

Starting Month: JAN Ending Month: DEC

Starting Day Type: DSGN Ending Day Type: SUN

Hour Util Percent
0 100
24

Schedule Name: PPL1

Project: Location: Client:

Program User: D JONES

Comments: OFFICE PEOPLE SCHEDULE

Starting Month: JAN Ending Month: DEC

Starting Day Type: DSGN Ending Day Type: WKDY

lour	Util Percent
0	0
7	50
8	100
11	80
12	40
13	80
14	100
16	70
17	30
18	0
24	

Starting Month: JAN Ending Month: DEC

Starting Day Type: SAT Ending Day Type: SUN

Hour	Util	Percent
0		0
24		

****************** ********************************** TRACE 600 ANALYSIS by ********************************* ************************

> FORT MCPHERSON & GILLEM EEAP #3105.000 ATLANTA, GA COE - DACA21-9-C-0097 DENNIS JONES BUILDING 207 - FORT GILLEM - BASELINE

Weather File Code:

ATLANTA.

Location:

Latitude:

33.0 (deg)

Longitude:

84.0 (deg)

Time Zone:

6

Elevation:

1,005 (ft)

Barometric Pressure:

28.8 (in. Hg)

Summer Clearness Number: 0.90 0.90 Winter Clearness Number: Summer Design Dry Bulb: 92 (F) 74 (F) Summer Design Wet Bulb: Winter Design Dry Bulb: 22 (F) Summer Ground Relectance: 0.20

Winter Ground Relectance:

0.20

Air Density:

0.0731 (Lbm/cuft)

Air Specific Heat:

0.2444 (Btu/lbm/F)

Density-Specific Heat Prod:

1.0727 (Btu-min./hr/cuft/F)

Latent Heat Factor:

4,721.8 (Btu-min./hr/cuft)

Enthalpy Factor:

4.3883 (Lb-min./hr/cuft)

Design Simulation Period: June

To November

System Simulation Period: January

To December

Cooling Load Methodology:

TETD/Time Averaging

Time/Date Program was Run:

6:57:34 3/20/92

Dataset Name:

G207 .TM

AIRFLOW - ALTERNATIVE 1

G207 - BASELINE

CDesign Airflow Quantities)

				Auxil.	Room			
System Number	System Type	Outside Airflow (Cfm)	Cooling Airflow (Cfm)	Heating Airflow (Cfm)	Return Airflow (Cfm)	Exhaust Airflow (Cfm)	Supply Airflow (Cfm)	Exhaust Airflow (Cfm)
1	FC	0	417,430	417,430	460,976	43,546	0	0
Totals		0	417,430	417,430	460,976	43,546	0	0

CAPACITY - ALTERNATIVE 1

G207 - BASELINE

		Coo		Heating	ng						
System Sys	•	•	Opt. Vent Capacity (Tons)	Cooling Totals (Tons)	Main Sys. Capacity (Btuh)	Aux. Sys. Capacity (Btuh)	Preheat Capacity (Btuh)	Reheat Capacity (Btuh)	Humidif. Capacity (Btuh)	Opt. Vent Capacity (Btuh)	Heatin Total: (Btuh
1 FC Totals	563.7 563.7	0.0	0.0		-3,000,000 -3,000,000	0	0	0	0	-	-3,000,00 -3,000,00

The building peaked at hour 14 month 6 with a capacity of 563.7 tons

ENGINEERING CHECKS - ALTERNATIVE 1

G207 - BASELINE

----- ENGINEERING CHECKS------

			Percent		Cool	ing		Heat	ing	
System	Main/	System	Outside	Cfm/	Cfm/	Sq Ft	Btuh/	Cfm/	Btuh/	Floor Area
Number	Auxiliary	Туре	Air	Sq Ft	Ton	/Ton	Sq Ft	Sq Ft	Sq Ft	Sq Ft
1	Main	FC	0.00	1.40	740.5	529.7	22.65	1.40	-10.05	298,599

em 1 Block FC - FAN COIL

Peaked at Time	==>	Mo/Hr:	6/14			" MO.	/Hr:	6/14		Mo/Hr: 13	5/ 1	
Outside Air ==>	OA	DB/WB/HR:	96/ 73/ 91.0			* O	ADB:	96 *		OADB:	-	
	Space	Ret. Air	Ret. Air	Net	Percnt	* * Si	pace	* Percnt *	Space Pe	ak Coili	Peak	Percnt
	Sens.+Lat.	Sensible	Latent	Total	Of Tot	* Sens	-	Of Tot *	Space Se			Of Tot
Envelope Loads	(Btuh)	(Btuh)	(Btuh)	(Btuh)	(%)	* (B	tuh)	(%) *	•		tuh)	(%)
Skylite Solr	0	0		0	0.00	*	0	0.00 *		0	0	0.00
Skylite Cond	0	0		0	0.00	*	0	0.00 *		0	0	0.00
Roof Cond	4,122,070	0		4,122,070	60.94	4,122	,070	67.47 *	-3,325,4	97 -3,325	,497	11.43
Glass Solar	243,936	0		243,936	3.61	* 234	, 176	3.83 *		0	0	0.0
Glass Cond	150,425	0		150,425	2.22	* 151	,830	2.49 *	-334,1	65 -334	, 165	1.1
Wall Cond	219,637	0		219,637	3.25	* 244	,625	4.00 *	-238,6	97 -238	,697	0.8
Partition	0			0	0.00	*	0	0.00 *		0	0	0.0
Exposed Floor	0			0	0.00	*	0	0.00 *	-55,2	91 -55	,291	0.19
Infiltration	1,652,943			1,652,943	24.44	* 984	,659	16.12 *	-2,008,5	54 -2,008	,554	6.9
Sub Total==>	6,389,010	0		6,389,010	94.45	* 5,737	,360	93.91 *		04 -5,962	,204	20.4
Internal Loads						*		*				
Lights	364,532	0		364,532	5.39	* 364	,532	5.97 *		0	0	0.0
People	10,800			10,800	0.16	* 7	,500	0.12 *		0	0	0.0
Misc	0	0	0	0	0.00	*	0	0.00 *		0	0	0.0
Sub Total==>	375,332	0	0	375,332	5.55	* 372	,032	6.09 *		0	0	0.0
Ceiling Load	0	0		0	0.00	*	0	0.00 *		0	0	0.0
outside Air	0	0	0	0	0.00	*	0	0.00 *		0	0	0.0
Fan Heat				0	0.00	*		0.00 *			0	0.0
ket. Fan Heat		0		0	0.00	*		0.00 *			0	0.0
Duct Heat Pkup		0		0	0.00	*		0.00 *			0	0.0
DV/UNDR Sizing	0			0	0.00	*	0	0.00 *	-23,142,7	64 -23,142	,764	79.5
Exhaust Heat		0	0	0		*		0.00 *			0	0.0
Terminal Bypass		0	0	0	-0.00	*		0.00 *			0	0.0
Grand Total==>	6,764,342	0	0	6,764,342	100.00	* 6,109	,393	100.00 *	-29,104,9	68 -29,104	,968	100.0
•••••	•••••	coo	LING COIL SI	ELECTION	•••••					AREAS-		
Tota	l Capacity	Sens Cap.	Coil Airfl	Enteri	ng DB/WB/H	R Lea	ving D	B/WB/HR	Gross Tot	al Gla	ss (sf)	(%)
(Tons) (Mbh)	(Mbh)	(cfm)	Deg F Deg	g F Grain	s Deg F	Deg F	Grains	Floor 2	98,599		
ain Clg 563.	7 6,764.3	6,068.8	417,430	75.1 6	2.7 68.	7 61.2	57.3	66.7	Part	0		
ux Clg 0.	0.0	0.0	0	0.0	0.0 0.	0.0	0.0	0.0	Exflr	2,041		
pt Vent 0.		0.0	0	0.0	0.0 0.	0.0	0.0	0.0	Roof 1	49,300		0 (
otals 563.	7 6,764.3								Wall	42,243	12,07	74 2
HEAT	ING COIL SEL	ECTION		AII	RFLOWS (cf	m)		ENGINEERING	CHECKS	TEMPER	ATURES	(F)
Capac	•	irfl Ent	Lvg	Type	Cooling	Heating	Cl	g % OA	0.0	Type	Clg	Htg
(Mb		_	Deg F	Vent	0	0	Cl	g Cfm/Sqft	1.40	SADB	61.4	130.
ain Htg -3,00	-		130.0	Infil	43,546	43,546	Cl	g Cfm/Ton	740.52	Plenum	75.0	65.0
-	0.0	0 0.0	0.0	Supply	417,430	417,430	Cl	g Sqft/Ton	529.72	Return	75.0	65.
reheat -	0.0 417,	430 65.0	61.2	Mincfm	0	0	Cl	g Btuh/Sqft	22.65	Ret/OA	75.0	65.
	0.0	0.0	0.0	Return	417,430	417,430	No	. People	30	Runarnd	75.0	65.
	0.0	0 0.0	0.0	Exhaust	0	0	Ht	g % OA	0.0	Fn MtrTD	0.0	0.6
ent	0.0	0 0.0	0.0	Rm Exh	0	0	Ht	g Cfm/SqFt	1.40	Fn BldTD	0.0	0.0
-3,00	n n			Auxil	0	0		g Btuh/SqFt	-10.05	Fn Frict	0.1	0.1

HEATING LOADS AT COIL PEAK - ALTERNATIVE 1

G207 - BASELINE

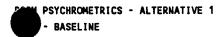
----- AIRFLOW HEATING LOADS-----(At time of Coil Peak)

			Vent	ilation	Op.	Vent	Rel	heat	Hum	idif	
Room			Airflow	Sensible	Airflow	Sensible	Airflow	Sensible	Airflow	Latent	Total
Number		Description	(Cfm)	(Btuh)	(Cfm)	(Btuh)	(Cfm)	(Btuh)	(Cfm)	(Btuh)	(Btuh)
1	LOWER	LEVEL	0	0	0	0	0	0	0	0	0
Zone	1	Total/Ave.	0	0	0	0	0	0	0	0	0
Zone	1	Block	0	0	0	0	0	0	0	0	0
2	UPPER	LEVEL	0	0	0	0	0	0	0	0	0
Zone	2	Total/Ave.	0	0	0	0	0	0	0	0	0
Zone	2	Block	0	0	0	0	0	0	0	0	0
System	1	Total/Ave.	0	0	0	0	0	0	0	0	0
System	1	Block	0	0	0	0	0	0	0	0	0

HEATING AIRFLOW HEAT GAIN/LOSS - ALTERNATIVE 1 G207 - BASELINE

------ AIRFLOW HEAT GAIN AND LOSS-----(At time of Coil Peak)

	•					- Heating	g					• • • • • • • • • • • • • • • • • • • •
		Supply	Return	System		System	Room			Run		System
		Fan	Fan	Exhaust		Exhaust	Exhaust	Ducted	Plenum	Around	Corridr	Return
Room		Heat	Heat	Heat Loss	Total	Airflow	Airflow	Airflow	Airflow	Airflow	Airflow	Airflow
Number	Description	(Btuh)	(Btuh)	(Btuh)	(Btuh)	(Cfm)	(Cfm)	(Cfm)	(Cfm)	(Cfm)	(Cfm)	(Cfm)
1	LOWER LEVEL	0	0	0	0	0	0	53,304	0	0	0	53,304
Zone	1 Total/Ave.	0	0	0	0	0	0	53,304	0	0	0	53,304
Zone	1 Block	0	0	0	0	0	0	53,304	0	0	0	53,304
2	UPPER LEVEL	0	0	0	0	0	0	364,127	0	0	0	364,127
Zone	2 Total/Ave.	0	0	0	0	0	0	364,127	0	0	0	364,127
Zone	2 Block	0	0	0	0	0	0	364,127	0	0	0	364,127
System	1 Total/Ave.	0	0	0	0	0	0	417,430	0	0	0	417,430
System	1 Block	0	0	0	0	0	0	417,430	0	0	0	417,430



----- PSYCHROMETRIC STATE POINTS-----

Room 1

	Dry	Wet	Relat.	Humid.		Temp.
	Bulb	Bulb	Humid.	Ratio	Enthalpy	Diff.
	(F)	(F)	(%)	(GR)	(Btu/Lb)	(F)
Space	75.0	64.3	56.7	76.6	30.0	
Main System						
Return Air Heat Pickup						0.0
Return Fan						0.0
Return Air	75.0	64.3	56.7	76.6	30.0	
Outdoor Air	92.3	74.4	44.2	105.0	38.7	
Return/Outdoor Air Mix	75.0	64.3	56.7	76.6	30.0	
Blow through Fan						0.1
Entering Coil	75.1	64.3	56.5	76.6	30.0	
Leaving Coil	54.9	53.6	92.5	61.9	22.8	
Draw Through Fan						0.0
Duct Frictional Heat						0.1
Supply Duct Heat Gain						0.0
Cold Deck Supply Air	55.0	53.7	92.2	61.9	22.8	
Supply Air	55.0	53.7	92.2	61.9	22.8	

ent Outside Air	0.00	(%)
ible Heat Ratio (SHR)	0.672	
Percent Supply Air Bypassing Coil	0.00	(%)
Coil Airflow	53,304	(Cfm)

^{*} THE PSYCHROMETRIC LOOP DID NOT CLOSE *

^{*} SUPPLY AIR TEMPERATURE RESET

Trane Air Conditioning Economics

By: Trane Customer Direct Service Network

ROOM PSYCHROMETRICS - ALTERNATIVE 1

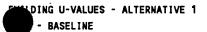
G207 - BASELINE

------PSYCHROMETRIC STATE POINTS-----

Room 2

	Dry	Wet	Relat.	Humid.		Temp.
	Bulb	Bulb	Humid.	Ratio	Enthalpy	Diff.
	(F)	(F)	(%)	(GR)	(Btu/Lb)	(F)
Space	75.0	62.4	50.0	67.5	28.5	
Main System						
Return Air Heat Pickup						0.0
Return Fan						0.0
Return Air	75. 0	62.4	50.0	67.5	28.5	
Outdoor Air	95.6	73.0	34.7	91.0	37.3	
Return/Outdoor Air Mix	75.0	62.4	50.0	67.5	28.5	
Blow through Fan						0.1
Entering Coil	75.1	62.4	49.9	67.5	28.6	
Leaving Coil	62.2	57.8	77.4	67.3	25.4	
Draw Through Fan						0.0
Duct Frictional Heat						0.1
Supply Duct Heat Gain						0.0
Cold Deck Supply Air	62.3	57.8	77.1	67.3	25.4	
Supply Air	62.3	57.8	77.1	67.3	25.4	

Percent Outside Air 0.00 (%)
Sensible Heat Ratio (SHR) 0.973
Percent Supply Air Bypassing Coil 0.00 (%)
Coil Airflow 364,127 (Cfm)



			Room U-Values									Room	Room	
						(Btu	ı/hr/sqf	t/F)				Mass	Capac.	
Room					Summr	Wintr		Summr	Wintr			(lb/	(Btu/	
Number	Desc	ription	Part.	ExFlr	Skylt	Skylt	Roof	Windo	Windo	Wall	Ceil.	sqft)	sqft/F)	
1	LOWER	LEVEL	0.000	0.630	0.000	0.000	0.000	1.200	1.333	0.184	0.000	14.3	2.77	
Zone	1	Total/Ave.	0.000	0.630	0.000	0.000	0.000	1.200	1.333	0.184	0.000	14.3	2.77	
2	UPPER	LEVEL	0.000	0.000	0.000	0.000	0.518	0.490	0.511	0.184	0.000	13.5	5.81	
Zone	2	Total/Ave.	0.000	0.000	0.000	0.000	0.518	0.490	0.511	0.184	0.000	13.5	5.81	
System	1	Total/Ave.	0.000	0.630	0.000	0.000	0.518	0.605	0.644	0.184	0.000	13.9	4.29	
Buildin	g		0.000	0.630	0.000	0.000	0.518	0.605	0.644	0.184	0.000	13.9	4.29	

BUILDING AREAS - ALTERNATIVE 1

G207 - BASELINE

------ BUILDING AREAS -----

Room				er of icate	Floor Area/Dupl Room	Total Floor Area	Partition Area	Exposed Floor Area	Skylight Area	Skl /Rf	Net Roof Area	Window Area	Win /Wl	Net Wall Area
Number	Descr	iption	Flr	Rm	(sqft)	(sqft)	(sqft)	(sqft)	(sqft)	(%)	(sqft)	(sqft)	(%)	(sqft)
1	LOWER	LEVEL	1	1	149,300	149,300	0	2,041	0	0	0	1,952	7	26,629
Zone	1	Total/Ave.				149,300	0	2,041	0	0	0	1,952	7	26,629
2	UPPER	LEVEL	1	1	149,300	149,300	0	0	0	0	149,300	10,122	74	3,540
Zone	2	Total/Ave.				149,300	0	0	0	0	149,300	10,122	74	3,540
System	1	Total/Ave.				298,599	0	2,041	0	0	149,300	12,074	29	30,169
Buildin	g					298,599	0	2,041	0	0	149,300	12,074	29	30,169

ASHRAE 90 ANALYSIS - ALTERNATIVE 1

G207 - BASELINE

----- ASHRAE 90 ANALYSIS-----

Overall Roof U-Value = 0.518 (Btu/Hr/Sq Ft/F)
Overall Wall U-Value = 0.304 (Btu/Hr/Sq Ft/F)
Overall Building U-Value = 0.471 (Btu/Hr/Sq Ft/F)

Roof Overall Thermal Transfer Value (OTTVr) = 47.78 (Btu/Hr/Sq Ft) Wall Overall Thermal Transfer Value (OTTVw) = 20.59 (Btu/Hr/Sq Ft)

SYSTEM LOAD PROFILE - ALTERNATIVE 1 G207 - BASELINE

Main System 1 FC FAN COIL

Percent	Cooling Load			Heating Load			Cooling Airflow			Heating Airflow		
Design	Cap.	Hours	Hours	Capacity	Hours	Hours	Cap.	Hours	Hours	Cap.	Hours	Hours
Load	(Ton)	(%)		(Btuh)	(%)		(Cfm)	(%)		(Cfm)	(%)	
0 - 5	28.2	0	0	-150,000	7	158	20,871.5	0	0	0.0	0	0
5 - 10	56.4	0	0	-300,000	2	54	41,743.0	0	0	0.0	0	0
10 - 15	84.6	0	0	-450,000	9	225	62,614.5	0	0	0.0	0	0
15 - 20	112.7	0	0	-600,000	2	46	83,486.0	0	0	0.0	0	0
20 - 25	140.9	0	0	-750,000	2	44	104,357.5	0	0	0.0	0	0
25 - 30	169.1	0	0	-900,000	0	0	125,229.0	0	0	0.0	0	0
30 - 35	197.3	0	0	-1,050,000	3	83	146,100.5	0	0	0.0	0	0
35 - 40	225.5	0	0	-1,200,000	1	28	166,972.1	0	0	0.0	0	0
40 - 45	253.7	0	0	-1,350,000	3	67	187,843.6	0	0	0.0	0	0
45 - 50	281.8	0	0	-1,500,000	2	50	208,715.1	0	0	0.0	0	0
50 - 55	310.0	0	0	-1,650,000	2	51	229,586.6	0	0	0.0	0	0
55 - 60	338.2	0	0	-1,800,000	1	25	250,458.1	0	0	0.0	0	0
60 - 65	366.4	0	0	-1,950,000	1	30	271,329.6	0	0	0.0	0	0
65 - 70	394.6	0	0	-2,100,000	2	51	292,201.1	0	0	0.0	0	0
70 - 75	422.8	0	0	-2,250,000	2	50	313,072.7	0	0	0.0	0	0
75 - 80	451.0	0	0	-2,400,001	1	21	333,944.2	0	0	0.0	0	0
80 - 85	479.1	0	0	-2,550,000	4	90	354,815.7	0	0	0.0	0	0
85 - 90	507.3	0	0	-2,700,001	4	93	375,687.2	0	0	0.0	0	0
90 - 95	535.5	0	0	-2,850,000	1	24	396,558.7	0	0	0.0	0	0
95 - 100	563.7	0	0	-3,000,000	51	1,219	417,430.2	100	2,896	0.0	0	0
Hours Off	0.0	0	8,760	0	0	6,351	0.0	0	5,864	0.0	0	8,760

PING COOL-HEAT DEMAND - ALTERNATIVE 1 - BASELINE

Januai	January		Design		Weekday		Saturday		Sunday		Mond	ay
Hour	OADB	OAWB	Htg Btuh	Clg Ton		Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton		Clg Ton
1	33.4	30.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
2	32.1	29.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
3	31.7	29.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
4	31.9	29.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
5	32.6	30.3	-2,999,999	0.0	-2,999,999	0.0	-2,999,999	0.0	-2,999,999	0.0	-2,999,999	0.0
6	33.6	31.3	-3,000,001	0.0	-2,999,999	0.0	-2,999,999	0.0	-2,999,999	0.0	-2,999,999	0.0
7	35.0	32.6	-3,000,001	0.0	-2,999,999	0.0	-2,999,999	0.0	-2,999,999	0.0	-2,999,999	0.0
8	36.6	34.4	-3,000,000	0.0	-2,999,999	0.0	-2,999,999	0.0	-2,999,999	0.0	-2,999,999	0.0
9	38.5	36.3	-3,000,000	0.0	-3,000,001	0.0	-3,000,001	0.0	-3,000,001	0.0	-3,000,001	0.0
10	40.4	37.7	-3,000,000	0.0	-3,000,001	0.0	-3,000,001	0.0	-3,000,001	0.0	-2,999,999	0.0
11	42.3	38.7	-3,000,000	0.0	-3,000,000	0.0	-3,000,001	0.0	-3,000,001	0.0	-3,000,000	0.0
12	44.2	39.6	-1,671,055	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0
13	45.8	40.5	-390,510	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0
14	47.2	41.1	-392,342	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0
15	48.2	41.6	-390,206	0.0	-1,099,761	0.0	-3,000,000	0.0	-3,000,000	0.0	-1,311,497	0.0
16	48.9	41.8	-385,015	0.0	-1,029,321	0.0	-1,588,414	0.0	-1,588,414	0.0	-1,029,321	0.0
17	49.1	41.9	-383,084	0.0	-1,573,079	0.0	-1,846,474	0.0	-1,846,474	0.0	-1,573,079	0.0
18	48.7	41.9	-383,084	0.0	-2,046,448	0.0	-2,174,039	0.0	-2,174,039	0.0	-2,046,448	0.0
19	47.4	41.7	-2,010,847	0.0	-2,405,937	0.0	-2,405,937	0.0	-2,405,937	0.0	-2,405,937	0.0
20	45.5	40.5	-2,344,434	0.0	-2,558,474	0.0	-2,558,474	0.0	-2,558,474	0.0	-2,558,474	0.0
21	43.1	38.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	40.4	36.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	37.7	34.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
24	35.3	32.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Febru												
,	ary		Desi	gn	Weekda	ay	Satu	rday	Sund	ay	Mond	ay
Hour	OADB	CAWB	Desi Htg Btuh	gn Clg Ton	Weekda Htg Btuh	-	Satu Htg Btuh	rday Clg Ton	Sund Htg Btuh	•	Mond Htg Btuh	•
		OAWB 34.5		_		-		rday Clg Ton 0.0	Sund Htg Btuh O	ay Clg Ton 0.0	Mond Hitg Btuh O	•
Hour	OADB		Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton
Hour 1	OADB 37.5	34.5 33.0	Htg Btuh O	Clg Ton 0.0	Htg Btuh O	Clg Ton	Htg Btuh O	Clg Ton 0.0	Htg Btuh O	Clg Ton	Htg Btuh O	Clg Ton 0.0
Hour 1 2	OADB 37.5 36.0	34.5 33.0	Htg Btuh O O	Clg Ton 0.0 0.0	Htg Btuh O O	0.0 0.0	Htg Btuh O O	Clg Ton 0.0 0.0	Htg Btuh O O	Clg Ton 0.0 0.0	Htg Btuh O O	Clg Ton 0.0 0.0
Hour 1 2 3	OADB 37.5 36.0 34.7	34.5 33.0 31.8	Htg Btuh O O O	Clg Ton 0.0 0.0 0.0	Htg Btuh O O O	Clg Ton 0.0 0.0 0.0	Htg Btuh O O O O	0.0 0.0 0.0	Htg Btuh 0 0 0 0	Clg Ton 0.0 0.0 0.0	Htg Btuh O O O	Clg Ton 0.0 0.0 0.0
Hour 1 2 3 4	OADB 37.5 36.0 34.7 33.6	34.5 33.0 31.8 30.9	Htg Btuh 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh O O O O	0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,999,999	0.0 0.0 0.0 0.0	Htg Btuh O O O	0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,999,999	0.0 0.0 0.0 0.0
Hour 1 2 3 4 5	OADB 37.5 36.0 34.7 33.6 32.8	34.5 33.0 31.8 30.9 30.1	Htg Btuh 0 0 0 0 -2,999,999	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 -2,999,999	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh O O O O	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,999,999	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999	Clg Ton 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6	OADB 37.5 36.0 34.7 33.6 32.8 32.2	34.5 33.0 31.8 30.9 30.1 29.8	Htg Btuh 0 0 0 0 -2,999,999 -3,000,001	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,999,999	Clg Ton 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6 7	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5	34.5 33.0 31.8 30.9 30.1 29.8 29.6	Htg Btuh 0 0 0 0 -2,999,999 -3,000,001 -2,999,999	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999	Clg Ton
Hour 1 2 3 4 5 6 7 8	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3	Htg Btuh 0 0 0 -2,999,999 -3,000,001 -2,999,999 -3,000,001	Clg Ton	Htg Btuh 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -2,999,999	Clg Ton
Hour 1 2 3 4 5 6 7 8 9	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6	Htg Btuh 0 0 0 -2,999,999 -3,000,001 -2,999,999 -3,000,001	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -2,999,999	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,001	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,001	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 -2,999,999 -2,999,999 -2,999,999 -2,999,999 -3,000,001	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6 33.0 34.8	Htg Btuh 0 0 0 -2,999,999 -3,000,001 -2,999,999 -3,000,001 -2,999,999 -3,000,000	Clg Ton	Htg Btuh 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -2,999,999 -3,000,001	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -3,000,001 -3,000,001 -2,999,999	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,001 -2,999,999	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 -2,999,999 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,001	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0 38.5	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6 33.0 34.8	Htg Btuh 0 0 0 -2,999,999 -3,000,001 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -3,000,000	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -2,999,999 -3,000,001	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -3,000,001 -3,000,001 -2,999,999 -3,000,001	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -2,999,999 -3,000,001	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,000	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0 38.5 41.3 43.8	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6 33.0 34.8 36.5	Htg Btuh 0 0 0 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -2,000,000 -3,000,000 -2,178,139	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -3,000,000	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -3,000,001 -3,000,001 -2,999,999 -3,000,001	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -3,000,001 -3,000,001 -2,999,999 -3,000,001	Clg Ton	Htg Btuh 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,000 -3,000,000	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0 38.5 41.3 43.8 45.9	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6 33.0 34.8 36.5 38.1	Htg Btuh 0 0 0 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -2,999,999 -3,000,000 -3,000,000 -2,178,139 -394,747	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -3,000,000 -3,000,000	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -3,000,001 -3,000,001 -2,999,999 -3,000,000 -3,000,000	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -3,000,001 -3,000,001 -2,999,999 -3,000,000 -3,000,000	Clg Ton	Htg Btuh 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,000 -3,000,000 -3,000,000	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0 38.5 41.3 43.8 45.9	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6 33.0 34.8 36.5 38.1 39.5	Htg Btuh 0 0 0 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -2,178,139 -394,747 -396,207	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -3,000,000 -3,000,000 -3,000,000	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,001 -3,000,000 -3,000,000 -3,000,000	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,001 -3,000,000 -3,000,000 -3,000,000	Clg Ton	Htg Btuh 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -3,000,000	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0 38.5 41.3 43.8 45.9 47.2	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6 33.0 34.8 36.5 38.1 39.5 40.4	Htg Btuh 0 0 0 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -2,999,999 -3,000,000 -2,178,139 -394,747 -396,207 -393,782	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -3,000,000 -3,000,000 -3,000,000 -1,323,369	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -3,000,001 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -3,000,000	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -3,000,000	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -1,400,536	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0 38.5 41.3 43.8 45.9 47.2	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6 33.0 34.8 36.5 38.1 39.5 40.4 40.6 40.2	Htg Btuh 0 0 0 0 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -3,000,000 -3,000,000 -2,178,139 -394,747 -396,207 -393,782 -387,556	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -3,000,000 -3,000,000 -3,000,000 -1,323,369 -976,724	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -3,000,001 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -3,000,000 -1,609,438	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -3,000,001 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -1,609,438	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -1,400,536 -976,724	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0 38.5 41.3 43.8 45.9 47.2 47.7	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6 33.0 34.8 36.5 38.1 39.5 40.4 40.6 40.2 39.8	Htg Btuh 0 0 0 0 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -3,000,000 -3,000,000 -2,178,139 -394,747 -396,207 -393,782 -387,556 -383,084	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -3,000,000 -3,000,000 -3,000,000 -1,323,369 -976,724 -1,377,560	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -3,000,001 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -3,000,000 -1,609,438 -1,650,955 -2,223,348 -2,435,463	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -3,000,001 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -1,609,438 -1,650,955	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -1,400,536 -976,724 -1,377,560	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	OADB 37.5 36.0 34.7 33.6 32.8 32.1 32.5 33.9 36.0 38.5 41.3 43.8 45.9 47.2 47.7 47.5 47.0 46.2 45.1	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6 33.0 34.8 36.5 38.1 39.5 40.4 40.6 40.2 39.8 39.9	Htg Btuh 0 0 0 0 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -3,000,000 -3,000,000 -2,178,139 -394,747 -396,207 -393,782 -387,556 -383,084 -383,084	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -3,000,000 -3,000,000 -3,000,000 -1,323,369 -976,724 -1,377,560 -2,095,758	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -3,000,001 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -1,609,438 -1,650,955 -2,223,348	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -3,000,001 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -1,609,438 -1,650,955 -2,223,348	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -1,400,536 -976,724 -1,377,560 -2,095,758	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	OADB 37.5 36.0 34.7 33.6 32.8 32.1 32.5 33.9 36.0 38.5 41.3 43.8 45.9 47.2 47.7 47.5 47.0 46.2 45.1	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6 33.0 34.8 36.5 38.1 39.5 40.4 40.6 40.2 39.8 39.9	Htg Btuh 0 0 0 0 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -2,178,139 -394,747 -396,207 -393,782 -387,556 -383,084 -383,084	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -3,000,000 -3,000,000 -3,000,000 -1,323,369 -976,724 -1,377,560 -2,095,758 -2,435,463	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -3,000,001 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -3,000,000 -1,609,438 -1,650,955 -2,223,348 -2,435,463	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -3,000,000 -1,609,438 -1,650,955 -2,223,348 -2,435,463	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -3,000,000 -1,400,536 -976,724 -1,377,560 -2,095,758 -2,435,463	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0 38.5 41.3 43.8 45.9 47.2 47.7 47.5 47.0 46.2 45.1 43.8	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6 33.0 34.8 36.5 38.1 39.5 40.4 40.6 40.2 39.8 39.9	Htg Btuh 0 0 0 0 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -3,000,000 -3,000,000 -2,178,139 -394,747 -396,207 -393,782 -387,556 -383,084 -574,013 -2,426,448	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -3,000,000 -3,000,000 -3,000,000 -1,323,369 -976,724 -1,377,560 -2,095,758 -2,435,463 -2,591,217	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -3,000,000 -1,609,438 -1,650,955 -2,223,348 -2,435,463 -2,591,217	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -3,000,000 -1,609,438 -1,650,955 -2,223,348 -2,435,463 -2,591,217	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -1,400,536 -976,724 -1,377,560 -2,095,758 -2,435,463 -2,591,217	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	OADB 37.5 36.0 34.7 33.6 32.8 32.2 32.1 32.5 33.9 36.0 38.5 41.3 43.8 45.9 47.2 47.7 47.5 47.0 46.2 45.1 43.8 42.3	34.5 33.0 31.8 30.9 30.1 29.8 29.6 30.3 31.6 33.0 34.8 36.5 38.1 39.5 40.4 40.6 40.2 39.8 39.9 39.7 39.7	Htg Btuh 0 0 0 0 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -2,178,139 -394,747 -396,207 -393,782 -387,556 -383,084 -383,084 -574,013 -2,426,448	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -2,999,999 -3,000,000 -3,000,000 -3,000,000 -3,000,000 -1,323,369 -976,724 -1,377,560 -2,095,758 -2,435,463 -2,591,217	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -3,000,000 -1,609,438 -1,650,955 -2,223,348 -2,435,463 -2,591,217	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -3,000,000 -1,609,438 -1,650,955 -2,223,348 -2,435,463 -2,591,217	Clg Ton	Htg Btuh 0 0 0 0 -2,999,999 -2,999,999 -2,999,999 -3,000,001 -3,000,000 -3,000,000 -3,000,000 -1,400,536 -976,724 -1,377,560 -2,095,758 -2,435,463 -2,591,217	Clg Ton

BUILDING COOL-HEAT DEMAND - ALTERNATIVE 1 G207 - BASELINE

March	Design		Weekday		Saturday		Sunday		Monday			
Hour	OADB	OAWB	Htg Btuh	Clg Ton	Htg Btuh		Htg Btuh		Htg Btuh	-		Clg Ton
1	45.4	41.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
2	43.3	39.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
3	41.6	38.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
4	40.6	37.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
5	40.2	37.3	-3,000,001	0.0	-3,000,000	0.0	-3,000,001	0.0	-3,000,001	0.0	-3,000,001	0.0
6	40.6	37.8	-3,000,001	0.0	-3,000,000	0.0	-2,999,999	0.0	-2,999,999	0.0	-2,999,999	0.0
7	41.6	39.0	-3,000,000	0.0	-3,000,000	0.0	-2,999,999	0.0	-3,000,001	0.0	-3,000,001	0.0
8	43.3	40.7	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0
9	45.4	42.5	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0
10	47.9	44.3	-2,088,946	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0
11	50.6	45.5	-400,680	0.0	-1,332,604	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0
12	53.3	46.8	-405,803	0.0	-387,604	0.0	-1,370,808	0.0	-1,475,566	0.0	-387,750	0.0
13	55.8	48.5	-407,805	0.0	-390,200	0.0	-387,691	0.0	-387,691	0.0	-390,328	0.0
14	58.0	49.6	-383,084	0.0	-392,804	0.0	-389,770	0.0	-389,770	0.0	-392,920	0.0
15	59.6	50.3	-383,084	0.0	-392,005	0.0	-389,249	0.0	-389,249	0.0	-392,110	0.0
16	60.7	50.9	-383,083	0.0	-388,641	0.0	-386,141	0.0	-386,141	0.0	-388,739	0.0
17	61.0	50.9	-383,083	0.0	-383,837	0.0	-272,440	0.0	-272,440	0.0	-219,554	0.0
18	60.7	50.7	-383,083	0.0	-219,808	0.0	-76,170	0.0	-76,170	0.0	-73,921	0.0
19	59.6	50.7	-381,059	0.0	-140,871	0.0	-140,871	0.0	-140,871	0.0	-140,871	0.0
20	58.0	50.5	-204,206	0.0	-160,520	0.0	-936,106	0.0	-936,106	0.0	-160,520	0.0
21	55.8	49.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
22	53.3	47.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
23	50.6	45.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
24	47.9	43.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
									_	•		
April			Desi	_	Weekd	•		ırday	Sund	•	Mond	•
Hour	OADB	OAWB	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton
Hour 1	57.7	53.9	Htg Btuh O	Clg Ton	Htg Btuh O	Clg Ton	Htg Btuh O	Clg Ton	Htg Btuh O	Clg Ton	Htg Btuh O	Clg Ton 0.0
Hour 1 2	57.7 55.9	53.9 52.7	Htg Btuh O O	Clg Ton 0.0 0.0	Htg Btuh O O	Clg Ton 0.0 0.0	Htg Btuh O O	0.0 0.0	Htg Btuh O O	Clg Ton 0.0 0.0	Htg Btuh O O	Clg Ton 0.0 0.0
Hour 1 2 3	57.7 55.9 54.2	53.9 52.7 51.3	Htg Btuh O O	Clg Ton 0.0 0.0 0.0	Htg Btuh O O O	Clg Ton 0.0 0.0 0.0	Htg Btuh O O O	Clg Ton 0.0 0.0 0.0	Htg Btuh O O	Clg Ton 0.0 0.0 0.0	Htg Btuh O O O	Clg Ton 0.0 0.0 0.0
Hour 1 2 3 4	57.7 55.9 54.2 52.9	53.9 52.7 51.3 50.2	Htg Btuh O O O	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh O O O	0.0 0.0 0.0 0.0	Htg Btuh O O O	0.0 0.0 0.0 0.0	Htg Btuh O O O	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh O O O	0.0 0.0 0.0 0.0
Hour 1 2 3 4 5	57.7 55.9 54.2 52.9 51.9	53.9 52.7 51.3 50.2 49.6	Htg Btuh 0 0 0 0 0 -3,000,000	0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 -1,041,799	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,616,916	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,616,916	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,616,916	Clg Ton 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5	57.7 55.9 54.2 52.9 51.9 51.2	53.9 52.7 51.3 50.2 49.6 49.2	Htg Btuh 0 0 0 0 -3,000,000	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -1,041,799 -1,715,184	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,616,916 -2,848,261	Clg Ton 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6 7	57.7 55.9 54.2 52.9 51.9 51.2 51.0	53.9 52.7 51.3 50.2 49.6 49.2 49.3	Htg Btuh 0 0 0 0 -3,000,000 -3,000,000	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -1,041,799 -1,715,184 -1,408,976	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,383,690	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,616,916 -2,848,261 -2,794,277	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6 7 8	57.7 55.9 54.2 52.9 51.9 51.2 51.0 51.6	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9	Htg Btuh 0 0 0 -3,000,000 -3,000,000 -3,000,000 -1,003,761	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -1,041,799 -1,715,184 -1,408,976 -637,872	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,383,690 -911,276	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,725,694 -1,272,556	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,616,916 -2,848,261 -2,794,277 -995,406	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6 7 8 9	57.7 55.9 54.2 52.9 51.9 51.2 51.0 51.6 53.3	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6	Htg Btuh 0 0 0 -3,000,000 -3,000,000 -3,000,000 -1,003,761 -15,140	Clg Ton	Htg Btuh 0 0 0 -1,041,799 -1,715,184 -1,408,976 -637,872 -48,234	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 -2,616,916 -2,616,916 -2,383,690 -911,276 -394,540	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,725,694 -1,272,556 -503,583	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 -2,616,916 -2,848,261 -2,794,277 -995,406 -149,780	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6 7 8 9	57.7 55.9 54.2 52.9 51.9 51.2 51.0 51.6 53.3 55.9	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8	Htg Btuh 0 0 0 -3,000,000 -3,000,000 -3,000,000 -1,003,761 -15,140 -23,407	Clg Ton	Htg Btuh 0 0 0 -1,041,799 -1,715,184 -1,408,976 -637,872 -48,234 0	Clg Ton	Htg Btuh 0 0 0 -2,616,916 -2,616,916 -2,383,690 -911,276 -394,540 0	Clg Ton	Htg Btuh 0 0 0 -2,616,916 -2,616,916 -2,725,694 -1,272,556 -503,583 -50,448	Clg Ton	Htg Btuh 0 0 0 -2,616,916 -2,848,261 -2,794,277 -995,406 -149,780 -46,633	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10	57.7 55.9 54.2 52.9 51.9 51.2 51.0 51.6 53.3 55.9 59.0	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4	Htg Btuh 0 0 0 -3,000,000 -3,000,000 -3,000,000 -1,003,761 -15,140 -23,407 -28,852	Clg Ton	Htg Btuh 0 0 0 -1,041,799 -1,715,184 -1,408,976 -637,872 -48,234 0 0	Clg Ton	Htg Btuh 0 0 0 -2,616,916 -2,616,916 -2,383,690 -911,276 -394,540 0	Clg Ton	Htg Btuh 0 0 0 -2,616,916 -2,616,916 -2,725,694 -1,272,556 -503,583 -50,448	Clg Ton	Htg Btuh 0 0 0 -2,616,916 -2,848,261 -2,794,277 -995,406 -149,780 -46,633 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11	57.7 55.9 54.2 52.9 51.9 51.6 53.3 55.9 59.0 62.4	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4 55.6	Htg Btuh 0 0 0 -3,000,000 -3,000,000 -3,000,000 -1,003,761 -15,140 -23,407 -28,852	Clg Ton	Htg Btuh 0 0 0 -1,041,799 -1,715,184 -1,408,976 -637,872 -48,234 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,383,690 -911,276 -394,540 0 0	Clg Ton	Htg Btuh 0 0 0 -2,616,916 -2,616,916 -2,725,694 -1,272,556 -503,583 -50,448 0 0	Clg Ton	Htg Btuh 0 0 0 -2,616,916 -2,848,261 -2,794,277 -995,406 -149,780 -46,633 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13	57.7 55.9 54.2 52.9 51.9 51.0 51.6 53.3 55.9 59.0 62.4 65.5	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4 55.6 57.7	Htg Btuh 0 0 0 -3,000,000 -3,000,000 -3,000,000 -1,003,761 -15,140 -23,407 -28,852 0 0	Clg Ton	Htg Btuh 0 0 0 -1,041,799 -1,715,184 -1,408,976 -637,872 -48,234 0 0 0 -15,944	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,383,690 -911,276 -394,540 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,725,694 -1,272,556 -503,583 -50,448 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,848,261 -2,794,277 -995,406 -149,780 -46,633 0 0 -15,973	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13	57.7 55.9 54.2 52.9 51.9 51.6 53.3 55.9 59.0 62.4 65.5 68.1	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4 55.6 57.7	Htg Btuh 0 0 0 -3,000,000 -3,000,000 -3,000,000 -1,003,761 -15,140 -23,407 -28,852 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -1,041,799 -1,715,184 -1,408,976 -637,872 -48,234 0 0 -15,944 -17,685	Clg Ton	Htg Btuh 0 0 0 -2,616,916 -2,616,916 -2,383,690 -911,276 -394,540 0 0 0 -15,144	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,725,694 -1,272,556 -503,583 -50,448 0 0 0 -15,150	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,848,261 -2,794,277 -995,406 -149,780 -46,633 0 0 -15,973 -17,709	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14	57.7 55.9 54.2 52.9 51.9 51.0 51.6 53.3 55.9 59.0 62.4 65.5 68.1 69.8	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4 55.6 57.7 59.4 60.7	Htg Btuh 0 0 0 0 -3,000,000 -3,000,000 -1,003,761 -15,140 -23,407 -28,852 0 0 0	Clg Ton	Htg Btuh 0 0 0 -1,041,799 -1,715,184 -1,408,976 -637,872 -48,234 0 0 -15,944 -17,685	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,383,690 -911,276 -394,540 0 0 0 -15,144	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,725,694 -1,272,556 -503,583 -50,448 0 0 -15,150	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,848,261 -2,794,277 -995,406 -149,780 -46,633 0 0 -15,973 -17,709	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	57.7 55.9 54.2 52.9 51.9 51.0 51.6 53.3 55.9 59.0 62.4 65.5 68.1 69.8 70.4	53.9 52.7 51.3 50.2 49.6 49.3 49.9 50.6 51.8 53.4 55.6 57.7 59.4 60.7 60.9	Htg Btuh 0 0 0 0 -3,000,000 -3,000,000 -1,003,761 -15,140 -23,407 -28,852 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 -1,041,799 -1,715,184 -1,408,976 -637,872 -48,234 0 0 -15,944 -17,685 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,383,690 -911,276 -394,540 0 0 0 -15,144 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,725,694 -1,272,556 -503,583 -50,448 0 0 0 -15,150 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,848,261 -2,794,277 -995,406 -149,780 -46,633 0 0 -15,973 -17,709 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	57.7 55.9 54.2 52.9 51.9 51.6 53.3 55.9 59.0 62.4 65.5 68.1 69.8 70.4 70.2	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4 55.6 57.7 59.4 60.7 60.9 60.2	Htg Btuh 0 0 0 -3,000,000 -3,000,000 -3,000,000 -1,003,761 -15,140 -23,407 -28,852 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -1,041,799 -1,715,184 -1,408,976 -637,872 -48,234 0 0 0 -15,944 -17,685 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,383,690 -911,276 -394,540 0 0 0 -15,144 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,725,694 -1,272,556 -503,583 -50,448 0 0 -15,150 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,848,261 -2,794,277 -995,406 -149,780 -46,633 0 0 -15,973 -17,709 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	57.7 55.9 54.2 52.9 51.9 51.6 53.3 55.9 59.0 62.4 65.5 68.1 69.8 70.4 70.2 69.5	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4 55.6 57.7 59.4 60.7 60.9 60.2 60.1	Htg Btuh 0 0 0 -3,000,000 -3,000,000 -3,000,000 -1,003,761 -15,140 -23,407 -28,852 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 -1,041,799 -1,715,184 -1,408,976 -637,872 -48,234 0 0 0 -15,944 -17,685 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,383,690 -911,276 -394,540 0 0 0 -15,144 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,725,694 -1,272,556 -503,583 -50,448 0 0 0 -15,150 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,848,261 -2,794,277 -995,406 -149,780 -46,633 0 0 -15,973 -17,709 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	57.7 55.9 54.2 52.9 51.9 51.6 53.3 55.9 59.0 62.4 65.5 68.1 69.8 70.4 70.2 69.5 68.5	53.9 52.7 51.3 50.2 49.6 49.2 49.9 50.6 51.8 53.4 55.6 57.7 59.4 60.7 60.9 60.1 59.4	Htg Btuh 0 0 0 0 -3,000,000 -3,000,000 -3,000,000 -1,003,761 -15,140 -23,407 -28,852 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 -1,041,799 -1,715,184 -1,408,976 -637,872 -48,234 0 0 -15,944 -17,685 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,383,690 -911,276 -394,540 0 0 0 -15,144 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,725,694 -1,272,556 -503,583 -50,448 0 0 0 -15,150 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,848,261 -2,794,277 -995,406 -149,780 -46,633 0 0 -15,973 -17,709 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	57.7 55.9 54.2 52.9 51.9 51.6 53.3 55.9 59.0 62.4 65.5 68.1 69.8 70.4 70.2 69.5 68.5 67.2	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4 55.6 57.7 59.4 60.7 60.9 60.2 60.1 59.4 59.7	Htg Btuh 0 0 0 0 -3,000,000 -3,000,000 -1,003,761 -15,140 -23,407 -28,852 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 -1,041,799 -1,715,184 -1,408,976 -637,872 -48,234 0 0 -15,944 -17,685 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,383,690 -911,276 -394,540 0 0 0 -15,144 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,725,694 -1,272,556 -503,583 -50,448 0 0 0 -15,150 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,848,261 -2,794,277 -995,406 -149,780 -46,633 0 0 -15,973 -17,709 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	57.7 55.9 54.2 52.9 51.0 51.6 53.3 55.9 59.0 62.4 65.5 68.1 69.8 70.4 70.2 69.5 68.5 67.2	53.9 52.7 51.3 50.2 49.6 49.3 49.9 50.6 51.8 53.4 55.6 57.7 60.9 60.2 60.1 59.4 59.7 59.3	Htg Btuh 0 0 0 0 -3,000,000 -3,000,000 -1,003,761 -15,140 -23,407 -28,852 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -1,041,799 -1,715,184 -1,408,976 -637,872 -48,234 0 0 -15,944 -17,685 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,383,690 -911,276 -394,540 0 0 0 -15,144 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,725,694 -1,272,556 -503,583 -50,448 0 0 0 -15,150 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,848,261 -2,794,277 -995,406 -149,780 -46,633 0 0 -15,973 -17,709 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	57.7 55.9 54.2 52.9 51.0 51.6 53.3 55.9 59.0 62.4 65.5 68.1 69.8 70.4 70.2 69.5 68.5 67.2 65.5	53.9 52.7 51.3 50.2 49.6 49.2 49.3 49.9 50.6 51.8 53.4 55.6 57.7 59.4 60.7 60.9 60.2 60.1 59.4 59.7 59.3 58.8	Htg Btuh 0 0 0 0 -3,000,000 -3,000,000 -1,003,761 -15,140 -23,407 -28,852 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -1,041,799 -1,715,184 -1,408,976 -637,872 -48,234 0 0 0 -15,944 -17,685 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,383,690 -911,276 -394,540 0 0 0 -15,144 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,725,694 -1,272,556 -503,583 -50,448 0 0 0 -15,150 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,848,261 -2,794,277 -995,406 -149,780 -46,633 0 0 -15,973 -17,709 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	57.7 55.9 54.2 52.9 51.0 51.6 53.3 55.9 59.0 62.4 65.5 68.1 69.8 70.4 70.2 69.5 68.5 67.2 65.5 63.7	53.9 52.7 51.3 50.2 49.6 49.3 49.9 50.6 51.8 53.4 55.6 57.7 60.9 60.2 60.1 59.4 59.7 59.3	Htg Btuh 0 0 0 0 -3,000,000 -3,000,000 -1,003,761 -15,140 -23,407 -28,852 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -1,041,799 -1,715,184 -1,408,976 -637,872 -48,234 0 0 -15,944 -17,685 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,383,690 -911,276 -394,540 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,616,916 -2,725,694 -1,272,556 -503,583 -50,448 0 0 0 -15,150 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 -2,616,916 -2,848,261 -2,794,277 -995,406 -149,780 -46,633 0 0 -15,973 -17,709 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.

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LDING COOL-HEAT DEMAND - ALTERNATIVE 1 - BASELINE

May			Desi	gn	Weekd	ay	Satu	rday	Sund	ay	Mond	ay
Hour	OADB	OAWB	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh		Htg Btuh	
1	66.6	62.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
2	64.5	60.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
3	62.7	59.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
4	61.2		0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
5	60.0		0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
6	59.3		0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
7	59.0		0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
8	59.5		0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
9	60.9		0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
10	63.0	57.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
11	65.7	58.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
12	68.7	59.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
13		61.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
14		63.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15		64.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
16	78.0	65.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
17		65.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
18		65.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
19		65.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
20	76.3		0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
21		67.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
		66.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
23		65.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
24		64.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
June			Desi	gn	Weekd		Satu	rday	Sund		Mond	
June Hour		OAWB	Desi Htg Btuh	Clg Ton	Weekd Htg Btuh		Satu Htg Btuh		Sund		Mond	
	73.0	67.9										
Hour	73.0 71.2	67.9 66.1	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton
Hour 1	73.0 71.2 69.7	67.9 66.1 65.2	Htg Btuh O	Clg Ton 0.0	Htg Btuh O	Clg Ton 0.0	Htg Btuh O	Clg Ton 0.0	Htg Btuh O	Clg Ton 0.0	Htg Btuh O	Clg Ton 0.0
Hour 1 2	73.0 71.2 69.7 68.5	67.9 66.1 65.2 64.3	Htg Btuh O O	Clg Ton 0.0 0.0	Htg Btuh O O	Clg Ton 0.0 0.0	Htg Btuh O O	0.0 0.0	Htg Btuh O O	0.0 0.0	Htg Btuh O O	Clg Ton 0.0 0.0
Hour 1 2 3	73.0 71.2 69.7 68.5 67.8	67.9 66.1 65.2 64.3 64.2	Htg Btuh 0 0 0	Clg Ton 0.0 0.0 0.0	Htg Btuh O O O	0.0 0.0 0.0	Htg Btuh O O	0.0 0.0 0.0	Htg Btuh O O	0.0 0.0 0.0	Htg Btuh 0 0 0	Clg Ton 0.0 0.0 0.0
Hour 1 2 3 4	73.0 71.2 69.7 68.5 67.8 67.6	67.9 66.1 65.2 64.3 64.2 64.2	Htg Btuh O O O	0.0 0.0 0.0 0.0	Htg Btuh O O O	0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0	0.0 0.0 0.0 0.0 0.0	Htg Btuh O O O	0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0	0.0 0.0 0.0 0.0
Hour 1 2 3 4 5	73.0 71.2 69.7 68.5 67.8 67.6	67.9 66.1 65.2 64.3 64.2 64.2	Htg Btuh O O O O	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh O O O O	0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4	67.9 66.1 65.2 64.3 64.2 64.2 64.8 65.7	Htg Btuh 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6 7	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6	67.9 66.1 65.2 64.3 64.2 64.2 64.8 65.7 66.2	Htg Btuh 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6 7 8 9	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2	67.9 66.1 65.2 64.3 64.2 64.2 64.8 65.7 66.2 67.2	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2	67.9 66.1 65.2 64.3 64.2 64.2 64.8 65.7 66.2 67.2 68.5	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2	67.9 66.1 65.2 64.3 64.2 64.2 64.8 65.7 66.2 67.2 68.5 70.0	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2 80.2 82.8	67.9 66.1 65.2 64.3 64.2 64.8 65.7 66.2 67.2 68.5 70.0 70.8	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2 80.2 82.8 85.0	67.9 66.1 65.2 64.3 64.2 64.8 65.7 66.2 67.2 68.5 70.0 70.8 71.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2 80.2 82.8 85.0 86.3	67.9 66.1 65.2 64.3 64.2 64.8 65.7 66.2 67.2 68.5 70.0 70.8 71.6 72.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2 80.2 82.8 85.0 86.3 86.8	67.9 66.1 65.2 64.3 64.2 64.2 64.8 65.7 66.2 67.2 68.5 70.0 70.8 71.6 72.3 72.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2 80.2 82.8 85.0 86.3 86.8	67.9 66.1 65.2 64.3 64.2 64.8 65.7 66.2 67.2 68.5 70.0 70.8 71.6 72.3 72.1 71.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cly Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2 80.2 82.8 85.0 86.3 86.8 86.6 85.8	67.9 66.1 65.2 64.3 64.2 64.8 65.7 66.2 67.2 68.5 70.0 70.8 71.6 72.3 72.1 71.7 71.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cly Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2 80.2 82.8 85.0 86.3 86.8 86.6 85.8 84.7	67.9 66.1 65.2 64.3 64.2 64.8 65.7 66.2 67.2 68.5 70.0 70.8 71.6 72.3 72.1 71.7 71.5 71.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2 80.2 82.8 85.0 86.3 86.8 86.6 85.8 84.7	67.9 66.1 65.2 64.3 64.2 64.8 65.7 66.2 67.2 68.5 70.0 70.8 71.6 72.3 72.1 71.7 71.5 71.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2 80.2 82.8 85.0 86.3 86.8 86.6 85.8 84.7 83.2	67.9 66.1 65.2 64.3 64.2 64.8 65.7 66.2 67.2 68.5 70.0 70.8 71.6 72.3 72.1 71.7 71.5 71.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Cly Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2 80.2 82.8 85.0 86.3 86.8 86.6 85.8 84.7 83.2 81.4 79.3	67.9 66.1 65.2 64.3 64.2 64.8 65.7 66.2 67.2 68.5 70.0 70.8 71.6 72.3 72.1 71.7 71.5 71.7 71.5 71.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	73.0 71.2 69.7 68.5 67.8 67.6 68.1 69.4 71.6 74.2 77.2 80.2 82.8 85.0 86.3 86.8 86.6 85.8 84.7 83.2 81.4 79.3 77.2	67.9 66.1 65.2 64.3 64.2 64.8 65.7 66.2 67.2 68.5 70.0 70.8 71.6 72.3 72.1 71.7 71.5 71.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton

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BUILDING COOL-HEAT DEMAND - ALTERNATIVE 1
G207 - BASELINE

July			Desi	gn	Weekd	lay	Satu	rday	Sund	lay	Mond	ay
Hour	OADB	OAWB		Clg Ton	Htg Btuh		Htg Btuh		Htg Btuh	-	Htg Btuh	
1		69.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
2		68.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
3	69.4		0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
4		66.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
5		66.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
6		65.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
7		66.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
8		67.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
9		68.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
10		69.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
11		70.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
12		71.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
13		72.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
14		73.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15		73.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
16		73.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
17	82.5		0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
18		72.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
19	81.1		0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
20		73.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
21		73.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
22		73.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
23		71.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
24		70.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	13.3	70.0	J	0.0	·	0.0	·	0.0	J	0.0	•	0.0
August	•		Desi	ian	Weeko	lav	Satu	ırdav	Sunc	lay	Mono	av
August Hour		OAWB			Weeko		Satu Htg Btuh				Mono	
Hour	OADB	OAWB 70.2	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Mono Htg Btuh O	Clg Ton
Hour 1	OADB 72.7	70.2	Htg Btuh O	Clg Ton 0.0	Htg Btuh O	Clg Ton 0.0	Htg Btuh O	Clg Ton	Htg Btuh O	Clg Ton 0.0	Htg Btuh	Clg Ton 0.0
Hour 1 2	OADB 72.7 71.2	70.2 69.0	Htg Btuh O O	Clg Ton 0.0 0.0	Htg Btuh O O	Clg Ton 0.0 0.0	Htg Btuh O O	0.0 0.0	Htg Btuh O O	Clg Ton 0.0 0.0	Htg Btuh O	Clg Ton 0.0 0.0
Hour 1 2 3	OADB 72.7 71.2 69.9	70.2 69.0 68.0	Htg Btuh O O O	Clg Ton 0.0 0.0 0.0	Htg Btuh O O O	Clg Ton 0.0 0.0 0.0	Htg Btuh O O O	Clg Ton 0.0 0.0 0.0	Htg Btuh O O O	Clg Ton 0.0 0.0 0.0	Htg Btuh O O O	0.0 0.0 0.0 0.0
Hour 1 2 3 4	OADB 72.7 71.2 69.9 68.8	70.2 69.0 68.0 67.1	Htg Btuh O O O	0.0 0.0 0.0 0.0 0.0	Htg Btuh O O O	0.0 0.0 0.0 0.0	Htg Btuh O O O O	0.0 0.0 0.0 0.0 0.0	Htg Btuh O O O	0.0 0.0 0.0 0.0	Htg Btuh O O O	Clg Ton 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5	OADB 72.7 71.2 69.9 68.8 68.0	70.2 69.0 68.0 67.1 66.6	Htg Btuh 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh O O O O	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh O O O O	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0	0.0 0.0 0.0 0.0 0.0	Htg Btuh O O O O	0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5	OADB 72.7 71.2 69.9 68.8 68.0 67.5	70.2 69.0 68.0 67.1 66.6 66.2	Htg Btuh 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6 7	OADB 72.7 71.2 69.9 68.8 68.0 67.5	70.2 69.0 68.0 67.1 66.6 66.2 66.1	Htg Btuh 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh O O O O	Clg Ton	Htg Btuh O O O O	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh O O O O	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6 7 8	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6 7 8	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7	Htg Btuh	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7 70.0	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5 79.1	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7 70.0 71.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5 79.1 81.1	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7 70.0 71.2 72.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5 79.1 81.1 82.5	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7 70.0 71.2 72.6 73.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5 79.1 81.1 82.5 83.0	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7 70.0 71.2 72.6 73.6 73.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5 79.1 81.1 82.5 83.0 82.8	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7 70.0 71.2 72.6 73.6 73.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5 79.1 81.1 82.5 83.0 82.8 82.3	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7 70.0 71.2 72.6 73.6 73.7 73.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5 79.1 81.1 82.5 83.0 82.8 82.3 81.5	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7 70.0 71.2 72.6 73.6 73.5 73.5 73.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5 79.1 81.1 82.5 83.0 82.8 82.3 81.5	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7 70.0 71.2 72.6 73.6 73.7 73.5 73.5 73.1	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5 79.1 81.1 82.5 83.0 82.8 82.3 81.5 80.4 79.1	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7 70.0 71.2 72.6 73.6 73.7 73.5 73.5 73.1 73.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5 79.1 81.1 82.5 83.0 82.8 82.3 81.5 80.4 79.1 77.6	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7 70.0 71.2 72.6 73.6 73.5 73.5 73.5 73.7 74.9 73.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	OADB 72.7 71.2 69.9 68.8 68.0 67.5 67.3 67.8 69.1 71.2 73.8 76.5 79.1 81.1 82.5 83.0 82.8 82.3 81.5 80.4 79.1 77.6 76.0	70.2 69.0 68.0 67.1 66.6 66.2 66.1 66.5 67.0 67.8 68.7 70.0 71.2 72.6 73.6 73.7 73.5 73.5 73.1 73.7	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.

ING COOL-HEAT DEMAND - ALTERNATIVE 1 - BASELINE

Septer	nber		Desi	gn	Weekd	ay	Satu	rday	Sunda	ay	Monda	av
Hour	OADB	CAWB	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh		Htg Btuh	•	Htg Btuh	
1	69.8	66.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
2	68.0	64.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
3	66.3	63.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
4	64.9	61.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
5	63.9	61.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
6	63.2	61.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
7	63.0	60.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
8	63.4	61.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
9	64.7	61.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
10	66.6	62.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
11	69.1	62.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
12	71.8	63.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
13	74.5	65.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
14	77.0	67.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15	78.9	68.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
16	80.2	68.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
17	80.6	68.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
18	80.4	68.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
19	79.7	70.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
20		71.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
21		71.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
		70.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
		69.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
24	71.8	67.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Octobe	er		Desi	gn	Weekd	ay	Satu	rday	Sunda	ау	Mond	ay
Octobe Hour	OADB	OAWB	Desi Htg Btuh	_	Weekd Htg Btuh		Satu Htg Btuh		Sunda Htg Btuh		Mond	
	OADB	0AWB 51.3		_					Sunda Htg Btuh O		Mond Htg Btuh O	
Hour	OADB 54.8		Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton
Hour 1	OADB 54.8 52.9	51.3	Htg Btuh O	Clg Ton 0.0	Htg Btuh O	Clg Ton 0.0	Htg Btuh O	Clg Ton 0.0	Htg Btuh O	Clg Ton 0.0	Htg Btuh O	Clg Ton 0.0
Hour 1 2	OADB 54.8 52.9 51.2	51.3 49.6	Htg Btuh O O	Clg Ton 0.0 0.0	Htg Btuh O O	Clg Ton 0.0 0.0	Htg Btuh O O	Clg Ton 0.0 0.0	Htg Btuh O O	0.0 0.0	Htg Btuh O O	0.0 0.0
Hour 1 2 3	OADB 54.8 52.9 51.2 49.8	51.3 49.6 48.2	Htg Btuh O O O	Clg Ton 0.0 0.0 0.0	Htg Btuh O O O	0.0 0.0 0.0	Htg Btuh O O O	0.0 0.0 0.0	Htg Btuh O O O	Clg Ton 0.0 0.0 0.0	Htg Btuh O O O	0.0 0.0 0.0
Hour 1 2 3 4	OADB 54.8 52.9 51.2 49.8 48.8	51.3 49.6 48.2 47.2	Htg Btuh O O O	0.0 0.0 0.0 0.0	Htg Btuh O O O	0.0 0.0 0.0 0.0 0.0	Htg Btuh O O O	0.0 0.0 0.0 0.0	Htg Btuh O O O	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0	0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9	51.3 49.6 48.2 47.2 46.2 45.7 45.6	Htg Btuh O O O O	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh O O O O	Clg Ton 0.0 0.0 0.0 0.0	Htg Btuh O O O O	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh O O O O	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh O O O O	Clg Ton 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2	Htg Btuh 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6 7 8	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3	Htg Btuh 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6 7 8 9	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7	Htg Btuh 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Htg Btuh 0 0 0 0 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6 7 8 9 10	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9 56.2	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Hour 1 2 3 4 5 6 7 8 9 10 11	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9 56.2 59.6	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9 51.5	Htg Btuh 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9 56.2 59.6 62.9	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9 51.5 53.5	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9 56.2 59.6 62.9 65.5	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9 51.5 53.5 55.2	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9 56.2 59.6 62.9 65.5 67.3	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9 51.5 53.5 55.2 56.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9 56.2 59.6 62.9 65.5 67.3 67.9	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9 51.5 53.5 55.2 56.3 56.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9 56.2 59.6 62.9 65.5 67.3 67.9	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9 51.5 53.5 55.2 56.3 56.6 56.4	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9 56.2 59.6 62.9 65.5 67.3 67.9 67.7	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9 51.5 53.5 56.3 56.6 56.4 56.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9 56.2 59.6 62.9 65.5 67.3 67.7 67.0 66.0	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9 51.5 53.5 55.2 56.6 56.4 56.6 57.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9 56.2 59.6 62.9 65.5 67.3 67.9 66.0 64.6	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9 51.5 53.5 55.2 56.3 56.6 56.6 57.6	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9 56.2 59.6 62.9 65.5 67.3 67.9 67.7 67.0 66.0 64.6 62.9	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9 51.5 53.5 56.6 56.4 56.6 57.6 57.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9 56.2 59.6 62.9 65.5 67.3 67.9 67.0 66.0 64.6 62.9 61.0	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9 51.5 53.5 56.6 56.4 56.6 57.6 57.9 57.3	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Hour 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	OADB 54.8 52.9 51.2 49.8 48.8 48.2 47.9 48.5 50.3 52.9 56.2 59.6 62.9 65.5 67.3 67.9 67.0 66.0 64.6 62.9 61.0 59.0	51.3 49.6 48.2 47.2 46.2 45.7 45.6 46.2 47.3 48.7 49.9 51.5 53.5 56.6 56.4 56.6 57.6 57.9	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Htg Btuh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Clg Ton 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.

BUILDING COOL-HEAT DEMAND - ALTERNATIVE 1 G207 - BASELINE

24 38.5 36.2

0.0

Novem	ber		Desi	gn	Weekd	lay	Satu	ırday	Sunday		Mond	lay
Hour	OADB	OAWB	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Btuh	Clg Ton	Htg Stuh	Clg Ton	Htg Btuh	Clg Ton
1	48.7	45.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
2	46.9	44.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
3	45.5	42.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
4	44.6	41.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
5	44.4	42.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,001	0.0	-3,000,001	0.0	-3,000,001	0.0
6	44.8	42.7	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0
7	45.9	43.9	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0
8	47.8	46.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0
9	50.2	48.0	-2,814,831	0.0	-2,961,015	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0
10	52.9	49.9	-388,778	0.0	-2,267,478	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0
11	55.8	51.1	-395,912	0.0	-32,391	0.0	-2,598,462	0.0	-2,598,462	0.0	-1,447,584	0.0
12	58.5	52.0	-133,777	0.0	. 0	0.0	-384,338	0.0	-384,338	0.0	-388,012	0.0
13	60.9	52.5	-20,096	0.0	0	0.0	. 0	0.0	0	0.0	0	0.0
14	62.8	53.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15	64.0	53.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
16	64.4	53.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
17	64.1	53.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
18	63.2	53.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
19	61.8	54.2	0	0.0	0	0.0	-474,221	0.0	-474,221	0.0	0	0.0
20	60.0	53.6	0	0.0	-58,062	0.0	-901,728	0.0	-901,728	0.0	-86,890	0.0
21	57.9	52.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
22	55.6	51.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
23	53.2	49.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
24	50.8	47.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
D	L											
Decem		OALID	Desi			ay	Satu	•	Sund	•	Mond	
Hour 1	OADB 37.5	OAWB 35.3	Htg Btuh O		Htg Btuh			Clg Ton	Htg Btuh		Htg Btuh	
2		35.1	0	0.0 0.0	0	0.0	0	0.0	0	0.0	0	0.0
3	37.4	35.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
4	38.1	36.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
5		37.6	-2,999,999		=	0.0	-	0.0	2 000 000	0.0	0 2 mm mm	0.0
6	40.9		-2,999,999	0.0 0.0	-2,999,999	0.0	-2,999,999	0.0	-2,999,999	0.0	-2,999,999	0.0
7		41.2	-3,000,000		-3,000,001	0.0	-2,999,999	0.0	-2,999,999	0.0	-2,999,999	0.0
8		43.1	-3,000,000	0.0 0.0	-2,999,999 -2,999,999	0.0 0.0	-2,999,999	0.0	-2,999,999	0.0	-2,999,999	0.0
9		45.3	-3,000,000	0.0	-3,000,000		-2,999,999 -2,999,999	0.0	-2,999,999	0.0	-2,999,999	0.0
10		47.0	-3,000,000	0.0	-3,000,000	0.0 0.0	-3,000,000	0.0 0.0	-2,999,999 -3,000,000	0.0	-3,000,001	0.0
11		48.1	-2,096,926	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000 -3,000,000	0.0
12		48.8	-390,730	0.0	-3,000,000	0.0	-3,000,000	0.0	-3,000,000	0.0 0.0	-3,000,000	0.0
13		49.2	-393,308	0.0	-659,574	0.0	-2,803,254	0.0	-2,803,254	0.0	-1,267,444	0.0
14		49.2	-394,881	0.0	-384,877	0.0	-558,911	0.0	-558,911			0.0
15		48.9	-391,496	0.0	-383,253	0.0	-697,244	0.0	-556,911 -697,244	0.0 0.0	-384,877 -383,253	0.0 0.0
16		48.2	-384,937	0.0	-583,874	0.0	-1,101,573	0.0				
17		47.3	-272,044	0.0	-1,313,488	0.0	-1,586,892	0.0	-1,101,573 -1,586,892	0.0 0.0	-583,874 -1,313,488	0.0 0.0
18		46.3	-224,380	0.0	-1,860,370	0.0	-1,987,960	0.0	-1,987,960	0.0	-1,313,466	0.0
19	49.3		-334,305	0.0	-2,151,766	0.0	-2,151,766	0.0	-1,967,960			
17			-1,633,814					0.0	-2,151,766	0.0 0.0	-2,151,766 -2,401,953	0.0 0.0
20	47 N											
20 21	47.0 44.5			0.0	-2,401,953	0.0	-2,401,953					
21	44.5	41.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	44.5 42.2											

0.0

0

0.0

0.0

0.0

BUTTOING TEMPERATURE PROFILES - ALTERNATIVE 1 BASELINE

	•••••	BUILDING TEMPERATURE PROFILES
Temperature		Room Number
Range	1 2	
(F)		
Max. Temp.	85.8 103.2	
Mo./Hr.	7 19 6 18	
Day Type	1 1	
Above 100	0 0	
95 - 100	0 0	
90 - 95	0 336	
85 - 90	0 679	
80 - 85	1,610 1,053	
75 - 80	1,193 1,124	
70 - 75	903 939	
65 - 70	1,360 2,056	
60 - 65	2,100 1,034	
55 - 60	1,267 850	
50 - 55	327 585	
low 50	0 104	
Min. Temp.	53.0 48.2	
Mo./Hr.	2 6 1 4	
Day Type	5 3	
1		

MONTHLY ENERGY CONSUMPTION - ALTERNATIVE 1

G207 - BASELINE

------ MONTHLY ENERGY CONSUMPTION -----

	ELEC	DEMAND	GAS	GAS DMND
	On Peak	On Peak	On Peak	On Peak
Month	(kWh)	(kW)	(Therm)	(Thrm/hr)
Jan	53,781	165	16,144	38
Feb	48,608	165	14,588	38
March	55, <i>7</i> 57	165	8,987	38
April	50,125	165	2,617	38
May	25,708	107	0	0
June	25,580	107	0	0
July	23,733	107	0	0
Aug	26,696	107	0	0
Sept	23,604	107	0	0
Oct	25,708	107	0	0
Nov	50,569	165	7,255	38
Dec	52,793	165	13,585	38
Total	462,663	165	63,177	38

Building Energy Consumption = Source Energy Consumption =

26,446 (Btu/Sq Ft/Year)

38,138 (Btu/Sq Ft/Year)

Floor Area = 298,599 (Sq Ft)

FOR PMENT ENERGY CONSUMPTION - ALTERNATIVE 1 - BASELINE

------ EQUIPMENT ENERGY CONSUMPTION -----

Ket	Equip					· Mon	thly Cons	sumption						
Num	Code	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	0ct	Nov	Dec	Total
0	LIGHTS													
	ELEC	24720	22360	26696	23604	25708	25580	23733	26696	23604	25708	23604	23733	295,749
	PK	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8
1	MISC LD													
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	MISC LD													
	GAS	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MISC LD													
	OIL	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MISC LD													
	P STEAM	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	MISC LD													
	P HOTH20	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	MISC LD													
	P CHILL	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	EQ4003				FAN C.V.									
	ELEC	26585	24012	26585	25727	0	0	0	0	0	0	25727	26585	155,220
	PK	53.6	53.6	53.6	53.6	0.0	0.0	0.0	0.0	0.0	0.0	53.6	53.6	53.6
1	EQ4003				FAN C.V.									
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1		•												
	GAS	16144	14588	8987	2617	0	0	0	0	0	0	7255	13585	63,177
	PK	37.5	37.5	37.5	37.5	0.0	0.0	0.0	0.0	0.0	0.0	37.5	37.5	37.5
1	EQ5020		HEA ⁻		CIRC. PU	IP C.V.								
	ELEC	740	668	740	237	0	0	0	0	0	0	370	740	3,494
	PK	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
1	EQ5240		BOII	LER FORCE	ED DRAFT	FAN								
	ELEC	1488	1344	1488	477	0	0	0	0	0	0	744	1488	7,029
	PK	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0

Trane Air Conditioning Economics V 600 By: Trane Customer Direct Service Network PAGE 3 PMENT ENERGY CONSUMPTION - ALTERNATIVE 1 BASELINE ELEC 248 224 248 80 0 0 0 248 0 124 1,172 PK 0.5 0.5 0.5 0.5 0.0 0.0 0.0

0.0

0.0

0.0

0.5

0.5

0.5

UTILITY PEAK CHECKSUMS - ALTERNATIVE 1

G207 - BASELINE

------UTILITY PEAK CHECKSUMS-----

Utility ELECTRIC DEMAND

Peak Value 165.4 (kW)		
Yearly Time of Peak 9 (hr) 1 (mo)		
Hour 9 Month 1		
Sub Total	0.0	0.00
	•	••••
Heating Equipment		
1 EQ2001 GAS FIRE TUBE HOT WATER	5.0	3.02
Sub Total	5.0	3.02
	3.0	3.02
Air Moving Equipment		
1 SUMMATION OF FAN ELECTRICAL DEMAND	53.6	32.41
Sub Total	53.6	32.41
	20.0	
Sub Total	0.0	0.00
Missellenesse		
Miscellaneous		
Lights	106.8	64.58

Lights	106.8	64.58
Base Utilities	0.0	0.00
Misc Equipment	0.0	0.00
Sub Total	106.8	64.58
Grand Total	165.4	100.00

CALLFORNIA TITLE 24 COMPLIANCE - ALTERNATIVE 1

- BASELINE

CALIFORNIA TITLE 24 COMPLIANCE REPORT

-----ENERGY USE SUMMARY

			PERCENT OF TOTAL	TOTAL SOURCE	ADJUSTED UNIT SOURCE
	ELEC	GAS	ENERGY	ENERGY	ENERGY
	(kWh/yr)	(kBtu/yr)	(%)	(kBtu/yr)	(kBtu/yr-sf)
Primary Heating	8,200.5	6,317,652.5	80.4	6,734,134.0	23.1
Primary Cooling					
Compressor	0.0	0.0	0.0	0.0	0.0
Tower/Cond Fans	0.0	0.0	0.0	0.0	0.0
Condenser Pump	0.0	0.0	0.0	0.0	0.0
Other Accessories	0.0	0.0	0.0	0.0	0.0
Auxiliary					
Supply Fans	155,220.0	0.0	6.7	1,589,456.1	5.5
Circulation Pumps	3,494.4	0.0	0.2	35,782.3	0.1
Base Utilities	0.0	0.0	0.0	0.0	0.0
Subtotal	158,714.3	0.0	6.9	1,625,238.5	5.6
ing	295,748.6	0.0	12.8	3,028,472.3	10.1
haseptacle	0.0	0.0	0.0	0.0	0.0
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0
Cogeneration	0.0	0.0	0.0	0.0	0.0
Totals	462,663.4	6,317,652.5	100.0	11,387,845.0	38.8

MONTHLY ENERGY CONSUMPTION - ALTERNATIVE 1

G207 - WALL INSULATION

------ MONTHLY ENERGY CONSUMPTION -----

Month	ELEC On Peak (kWh)	DEMAND On Peak (kW)	GAS On Peak (Therm)	GAS DMND On Peak (Thrm/hr)
_	F2 221		15 030	20
Jan	53,281	164	15,930	38
Feb	48,156	164	14,392	38
March	55,257	164	8,951	38
April	49,641	164	2,617	38
May	25,708	107	0	0
June	25,580	107	0	0
July	23,733	107	0	0
Aug	26,696	107	0	0
Sept	23,604	107	0	0
Oct	25,708	107	0	0
Nov	50,085	164	7,172	38
Dec	52,293	164	13,353	38
Total	459,743	164	62,416	38

Building Energy Consumption = 26,158 (Btu/Sq Ft/Year)
Source Energy Consumption = 37,769 (Btu/Sq Ft/Year)

Floor Area = 298,599 (Sq Ft)

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EQUIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1 G207 - WALL INSULATION

----- EQUIPMENT ENERGY CONSUMPTION------

Ref	Equip					Mon	thly Con	sumption						
Num	Code	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
0	LIGHTS													
	ELEC	24720	22360	26696	23604	25708	25580	23733	26696	23604	25708	23604	23733	295,749
	PK	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8
1	MISC LD													
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	MISC LD													
	GAS	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3														
	OIL	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	MISC LD													
	P STEAM	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	MISC LD													
	P HOTH20	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	MISC LD		•		-			_	_			_	_	_
	P CHILL	0.0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	EQ4003				FAN C.V.									
	ELEC	26085	23560	26085	25243	0	0	0	0	0	0	25243	26085	152,300
	PK	52.6	52.6	52.6	52.6	0.0	0.0	0.0	0.0	0.0	0.0	52.6	52.6	52.6
1	EQ4003			CENTRIF.	FAN C.V.									
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	EQ2001				BE HOT WA									
	GAS	15930	14392	8951	2617	0	0	0	0	0	0	7172	13353	62,416
	PK	37.5	37.5	37.5	37.5	0.0	0.0	0.0	0.0	0.0	0.0	37.5	37.5	37.5
1	EQ5020				CIRC. PUN									
	ELEC	740	668	740	237	0	0	0	0	0	0	370	740	3,494
	PK	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
1	EQ5240			LER FORC										
	ELEC	1488	1344	1488	477	0	0	0	0	0	0	744	1488	7,029
	PK	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0

Trane Air Conditioning Economics
By: Trane Customer Direct Service Network

V 600 PAGE

EQUIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1 G207 - WALL INSULATION

1	EQ5307		BOILER	CONTROL	S									
	ELEC	248	224	248	80	0	0	0	0	0	0	124	248	1,172
	PK	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5

Trane Air Conditioning Economics
By: Trane Customer Direct Service Network

UTILITY PEAK CHECKSUMS - ALTERNATIVE 1 G207 - WALL INSULATION

------UTILITY PEAK CHECKSUMS-----

OTILITY PEAK	CHEC	KSUM
Utility ELECTRIC DEMAND		
Peak Value 164.4 (kW) Yearly Time of Peak 9 (hr) 1 (mo)		
Hour 9 Month 1		
Sub Total	0.0	0.00
Heating Equipment		
1 EQ2001 GAS FIRE TUBE HOT WATER	5.0	3.04
Sub Total	5.0	3.04
Air Moving Equipment		
1 SUMMATION OF FAN ELECTRICAL DEMAND	52.6	31.99
Sub Total	52.6	31.99
Sub Total	0.0	0.00
Miscellaneous		
Lights Base Utilities Misc Equipment Sub Total	0.0	64.97 0.00 0.00 64.97
Grand Total	164.4	100.00

CALIFORNIA TITLE 24 COMPLIANCE - ALTERNATIVE 1

G207 - WALL INSULATION

------ENERGY USE SUMMARY

	ELEC	GAS	PERCENT OF TOTAL ENERGY	TOTAL SOURCE ENERGY	ADJUSTED UNIT SOURCE ENERGY
	(kWh/yr)	(kBtu/yr)	(%)	(kBtu/yr)	(kBtu/yr-sf)
Primary Heating	8,200.5	6,241,558.5	80.3	6,654,035.0	22.8
Primary Cooling					
Compressor	0.0	0.0	0.0	0.0	0.0
Tower/Cond Fans	0.0	0.0	0.0	0.0	0.0
Condenser Pump	0.0	0.0	0.0	0.0	0.0
Other Accessories	0.0	0.0	0.0	0.0	0.0
Auxiliary					
Supply Fans	152,300.0	0.0	6.7	1,559,555.4	5.4
Circulation Pumps	3,494.4	0.0	0.2	35,782.3	0.1
Base Utilities	0.0	0.0	0.0	0.0	0.0
Subtotal	155,794.3	0.0	6.8	1,595,337.8	5.5
Lighting	295,748.6	0.0	12.9	3,028,472.3	10.1
Receptacle	0.0	0.0	0.0	0.0	0.0
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0
Cogeneration	0.0	0.0	0.0	0.0	0.0
Totals	459,743.4	6,241,558.5	100.0	11,277,845.0	38.5

MONTHLY ENERGY CONSUMPTION - ALTERNATIVE 1

G207 - ROOF INSULATION

------ MONTHLY ENERGY CONSUMPTION -----

Month	ELEC On Peak (kWh)	DEMAND On Peak (kW)	GAS On Peak (Therm)	GAS DMND On Peak (Thrm/hr)
Jan	35,407	128	6,496	38
Feb	32,013	128	6,603	38
March	36,610	128	2,643	38
April	31,705	128	49	16
May	25,708	107	0	0
June	25,580	107	0	0
July	23,733	107	0	0
Aug	26,696	107	0	0
Sept	23,604	107	0	0
Oct	25,708	107	0	0
Nov	32,499	128	1,419	38
Dec	34,320	128	4,875	38
Total	353,584	128	22,084	38

Building Energy Consumption = 11,437 (Btu/Sq Ft/Year)
Source Energy Consumption = 19,911 (Btu/Sq Ft/Year)

Floor Area = 298,599 (Sq Ft)

Trane Air Conditioning Economics
By: Trane Customer Direct Service Network

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EQUIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1 G207 - ROOF INSULATION

------ EQUIPMENT ENERGY CONSUMPTION -----

ef	Equip	_					thly Con							
lum	Code	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Tota:
0	LIGHTS													
	ELEC	24720	22360	26696	23604	25708	25580	23733	26696	23604	25708	23604	23733	295,74
	PK	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.
1	MISC LD										_			
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
2	MISC LD													
	GAS	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
3	MISC LD													
	OIL	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
4	MISC LD					_							•	
	P STEAM	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
5	MISC LD P HOTH2O	0	0	0	0	0	0	0	0	0	0	0	0	
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Ŭ
6	MISC LD P CHILL	o	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1	EQ4003		FC (CENTRIF.	FAN C.V									
	ELEC	8211	7417	8211	7946	0	0	0	0	0	0	7946	8211	47,94
	PK	16.6	16.6	16.6	16.6	0.0	0.0	0.0	0.0	0.0	0.0	16.6	16.6	16
1	EQ4003		FC (CENTRIF.	FAN C.V	•								
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
1	EQ2001			FIRE TU										
	GAS	6496	6603	2643	49	0	0	0	0	0	0	1419	4875	22,08
	PK	37.5	37.5	37.5	15.5	0.0	0.0	0.0	0.0	0.0	0.0	37.5	37.5	37.
1	EQ5020			WATER			_	_	_	_	_			
	ELEC	740	668	509	46	0	0	0	0	0	0	283	710	2,95
	PK	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.
1	EQ5240	4		LER FORCE				_			_	F30	1422	
	ELEC	1488	1344	1023	93	0	0	0	0	0	0	570	1428	5,94
	PK	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.

Trane Air Conditioning Economics
By: Trane Customer Direct Service Network

V 600 PAGE 3

EQUIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1 G207 - ROOF INSULATION

1	EQ5307		BOILER	CONTRO	ន									
	ELEC	248	224	170	15	0	0	0	0	0	0	95	238	991
	PK	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5

V 600 PAGE

UTILITY PEAK CHECKSUMS - ALTERNATIVE 1 G207 - ROOF INSULATION

Grand Total

UTILITY P	EAK CHEC	K S U M S	
Utility ELECTRIC DEMAND			
Peak Value 128.4 (kW) Yearly Time of Peak 9 (hr) 1 (mo)			
Hour 9 Month 1			
Sub Total	0.0	0.00	
Heating Equipment			
1 EQ2001 GAS FIRE TUBE HOT WATER	5.0	3.89	
Sub Total	5.0	3.89	
Air Moving Equipment			
1 SUMMATION OF FAN ELECTRICAL DEMAND	16.6	12.90	
Sub Total	16.6	12.90	
Sub Total	0.0	0.00	
Miscellaneous			
Lights Base Utilities Misc Equipment Sub Total	106.8 0.0 0.0 106.8	83.21 0.00 0.00 83.21	

128.4 100.00

CALIFORNIA TITLE 24 COMPLIANCE - ALTERNATIVE 1

G207 - ROOF INSULATION

-----ENERGY USE SUMMARY

	ELEC (kWh/yr)	GAS (kBtu/yr)	PERCENT OF TOTAL ENERGY (%)	TOTAL SOURCE ENERGY (kBtu/yr)	ADJUSTED UNIT SOURCE ENERGY (kBtu/yr-sf)
Primary Heating	6,937.0	2,208,441.5	65.4	2,395,710.2	8.2
Primary Cooling					
Compressor	0.0	0.0	0.0	0.0	0.0
Tower/Cond Fans	0.0	0.0	0.0	0.0	0.0
Condenser Pump	0.0	0.0	0.0	0.0	0.0
Other Accessories	0.0	0.0	0.0	0.0	0.0
Auxiliary					
Supply Fans	47,942.7	0.0	4.8	490,934.5	1.7
Circulation Pumps	2,956.0	0.0	0.3	30,269.1	0.1
Base Utilities	0.0	0.0	0.0	0.0	0.0
Subtotal	50,898.7	0.0	5.1	521,203.6	1.8
Lighting	295,748.6	0.0	29.6	3,028,472.3	10.1
Receptacle	0.0	0.0	0.0	0.0	0.0
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0
Cogeneration	0.0	0.0	0.0	0.0	0.0
Totals	353,584.3	2,208,441.5	100.0	5,945,386.5	20.2

MONTHLY ENERGY CONSUMPTION - ALTERNATIVE 1

G207 - INSULATED GLASS

------ MONTHLY ENERGY CONSUMPTION ------

	ELEC On Peak	DEMAND On Peak	GAS On Peak	GAS DMND On Peak
Month	(k\h)	(kW)	(Therm)	(Thrm/hr)
Jan	53,667	165	16,093	38
Feb	48,505	165	14,541	38
March	55,643	165	8,912	38
April	50,015	165	2,605	38
May	25,708	107	0	0
June	25,580	107	0	0
July	23,733	107	0	0
Aug	26,696	107	0	0
Sept	23,604	107	0	0
0ct	25,708	107	0	0
Nov	50,459	165	7,198	38
Dec	52,679	165	13,527	38
Total	461,999	165	62,875	38

Building Energy Consumption = 26,337 (Btu/Sq Ft/Year)

Source Energy Consumption = 38,009 (Btu/Sq Ft/Year)

Floor Area = 298,599 (Sq Ft)

- INSULATED GLASS

------ EQUIPMENT ENERGY CONSUMPTION------

Ref	Equip			• • • • • • • •		Mon	thly Con	sumption						
	Code	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	0ct	Nov	Dec	Total
0	LIGHTS													
	ELEC	24720	22360	26696	23604	25708	25580	23733	26696	23604	25708	23604	23733	295,749
	PK	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8
1	MISC LD													
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	MISC LD													
	GAS	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MISC LD													
	OIL	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MISC LD													
	P STEAM	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	MISC LD													
	P HOTH20	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	MISC LD													
	P CHILL	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	EQ4003			CENTRIF.		•								
	ELEC	26471	23909	26471	25617	0	0	0	0	0	0	25617	26471	154,556
	PK	53.4	53.4	53.4	53.4	0.0	0.0	0.0	0.0	0.0	0.0	53.4	53.4	53.4
1	EQ4003		FC (CENTRIF.	FAN C.V	•								
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	EQ2001			FIRE TU	BE HOT W	ATER								
	GAS	16093	14541	8912	2605	0	0	0	0	0	0	7198	13527	62,875
	PK	37.5	37.5	37.5	37.5	0.0	0.0	0.0	0.0	0.0	0.0	37.5	37.5	37.5
1	EQ5020		HEA	T WATER (CIRC. PU	P C.V.								
	ELEC	740	668	740	237	0	0	0	0	0	0	370	740	3,494
	PK	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
1	EQ5240		BOI	LER FORCE	ED DRAFT	FAN								
	ELEC	1488	1344	1488	477	0	0	0	0	0	0	744	1488	7,029
	PK	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0

Trane Air Conditioning Economics V 600 By: Trane Customer Direct Service Network PAGE 3 MENT ENERGY CONSUMPTION - ALTERNATIVE 1 INSULATED GLASS 0 124 248 ELEC 248 224 248 80 0 0 0 1,172

0.0

0.0

0.0

PK

0.5

0.5

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0.0

0.0

0.0

0.5

0.5

0.5

UTILITY PEAK CHECKSUMS - ALTERNATIVE 1

G207 - INSULATED GLASS

------UTILITY PEAK CHECKSUMS-----

Utility ELECTRIC DEMAND

Peak Value 165.2 (kW)

Yearly Time of Peak 9 (hr) 1 (mo)

Hour 9 Month 1			
Out. Takal			
Sub Total		0.0	0.00
Heating Equipment			
1 EQ2001	GAS FIRE TUBE HOT WATER	5.0	3.02
	C.C. Y. T.C. T.C. T. T.C. T.C. T.C. T.C.	3.0	3.02
Sub Total		5.0	3.02
Air Moving Equipment			
1	SUMMATION OF FAN ELECTRICAL DEMAND	53.4	32.31
Sub Total		53.4	32.31
Sub Total		0.0	0.00
Minallana			

Miscellaneous

Lights	106.8	64.67
Base Utilities	0.0	0.00
Misc Equipment	0.0	0.00
Sub Total	106.8	64.67
Grand Total	165.2	100.00

FORNIA TITLE 24 COMPLIANCE - ALTERNATIVE 1

- INSULATED GLASS

CALIFORNIA TITLE 24 COMPLIANCE REPORT ------

-----ENERGY USE SUMMARY

			PERCENT	TOTAL	ADJUSTED
			OF TOTAL	SOURCE	UNIT SOURCE
	ELEC	GAS	ENERGY	ENERGY	ENERGY
	(kWh/yr)	(kBtu/yr)	(%)	(kBtu/yr)	(kBtu/yr-sf)
Primary Heating	8,200.5	6,287,502.0	80.3	6,702,396.5	23.0
Primary Cooling					
Compressor	0.0	0.0	0.0	0.0	0.0
Tower/Cond Fans	0.0	0.0	0.0	0.0	0.0
Condenser Pump	0.0	0.0	0.0	0.0	0.0
Other Accessories	0.0	0.0	0.0	0.0	0.0
Auxiliary					
Supply Fans	154,555.8	0.0	6.7	1,582,654.9	5.4
Circulation Pumps	3,494.4	0.0	0.2	35,782.3	0.1
Base Utilities	0.0	0.0	0.0	0.0	0.0
Subtotal	158,050.1	0.0	6.9	1,618,437.1	5.6
ing	295,748.6	0.0	12.8	3,028,472.3	10.1
ptacle	0.0	0.0	0.0	0.0	0.0
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0
Cogeneration	0.0	0.0	0.0	0.0	0.0
Totals	461,999.2	6,287,502.0	100.0	11,349,306.0	38.7

MONTHLY ENERGY CONSUMPTION - ALTERNATIVE 1

G207 - WEATHERSTRIP AND CAULK

------ MONTHLY ENERGY CONSUMPTION -----

	ELEC On Peak	DEMAND On Peak	GAS On Peak	GAS DMND On Peak
Month	(kWh)	(kW)	(Therm)	(Thrm/hr)
Jan	53,750	165	16,131	38
Feb	48,581	165	14,575	38
March	55,726	165	8,969	38
April	50,095	165	2,614	38
May	25,708	107	0	0
June	25,580	107	0	0
July	23,733	107	0	0
Aug	26,696	107	0	0
Sept	23,604	107	0	0
Oct	25,708	107	0	0
Nov	50,540	165	7,246	38
Dec	52,762	165	13,569	38
Total	462,485	165	63,104	38

Building Energy Consumption = 26,420 (Btu/Sq Ft/Year)

Source Energy Consumption = 38,106 (Btu/Sq Ft/Year)

Floor Area = 298,599 (Sq Ft)

PMENT ENERGY CONSUMPTION - ALTERNATIVE 1
- WEATHERSTRIP AND CAULK

------ EQUIPMENT ENERGY CONSUMPTION ------

Ref	e 2													
	Equip Code	Jan	Feb	Mar	Apr	May	thly Con: June	sumption July	Aug	Sep	0ct	Nov	Dec	Total
Ω	LIGHTS													
•	ELEC	24720	22360	26696	23604	25708	25580	23733	26696	23604	25708	23604	23733	295,749
	PK	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8
1	MISC LD													
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	MISC LD													
	GAS	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MISC LD													
	OIL	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MISC LD													
	P STEAM	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	MISC LD													
	P HOTH20	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	MISC LD	_												
	P CHILL	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	EQ4003			CENTRIF.										
	ELEC	26554	23984	26554	25697	0	0	0	0	0	0	25697	26554	155,041
	PK	53.5	53.5	53.5	53.5	0.0	0.0	0.0	0.0	0.0	0.0	53.5	53.5	53.5
1	EQ4003			CENTRIF.										
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	EQ2001		GAS	FIRE TU	BE HOT W	ATER								
	GAS	16131	14575	8969	2614	0	0	0	0	0	0	7246	13569	63,104
	PK	37.5	37.5	37.5	37.5	0.0	0.0	0.0	0.0	0.0	0.0	37.5	37.5	37.5
1	EQ5020		HEA.	T WATER (CIRC. PU	MP C.V.								
	ELEC	740	668	740	237	0	0	0	0	0	0	370	740	3,494
	PK	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
1	EQ5240		BOII	LER FORCE	ED DRAFT	FAN								
	ELEC	1488	1344	1488	477	0	0	0	0	0	0	744	1488	7,029
	ELEC			3.0		•	•	•	•	-	-	, , ,		.,

Trane Air Conditioning Economics V 600 By: Trane Customer Direct Service Network PAGE 3 MENT ENERGY CONSUMPTION - ALTERNATIVE 1 - WEATHERSTRIP AND CAULK ELEC 248 224 248 80 0 . 0 0 0 0 0 124 248 1,172

0.0 0.0

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0.0

0.0

0.5

0.5

0.5

0.5

PK

0.5

0.5

0.5

0.0

UTILITY PEAK CHECKSUMS - ALTERNATIVE 1 G207 - WEATHERSTRIP AND CAULK

------UTILITY PEAK CHECKSUMS-----

Utility ELECTRIC DEMAND

Peak Value 165.3 (kH)

Peak value 100.5 (kW)		
Yearly Time of Peak 9 (hr) 1 (mo)		
Hour 9 Month 1		
Sub Total	0.0	0.00
Heating Equipment		
1 EQ2001 GAS FIRE TUBE HOT WATER	5.0	3.02
Sub Total	5.0	3.02
Air Moving Equipment		
1 SUMMATION OF FAN ELECTRICAL DEMAND	53.5	32.38
Sub Total	53.5	32.38
Sub Total	0.0	0.00
Miscellaneous		
Lights	106.8	64.60
Base Utilities	0.0	0.00

Lights	106.8	64.60
Base Utilities	0.0	0.00
Misc Equipment	0.0	0.00
Sub Total	106.8	64.60
Grand Total	165.3	100.00

FORNIA TITLE 24 COMPLIANCE - ALTERNATIVE 1

- WEATHERSTRIP AND CAULK

Weather NameATLANTA.Gross Conditioned Floor Area (sqft)298,599ACM Multiplier1.025

-----ENERGY USE SUMMARY

			PERCENT	TOTAL	ADJUSTED
			OF TOTAL	SOURCE	UNIT SOURCE
	ELEC	GAS	ENERGY	ENERGY	ENERGY
	(kWh/yr)	(kBtu/yr)	(%)	(kBtu/yr)	(kBtu/yr-sf)
Primary Heating	8,200.5	6,310,442.0	80.3	6,726,544.0	23.1
Primary Cooling				•	
Compressor	0.0	0.0	0.0	0.0	0.0
Tower/Cond Fans	0.0	0.0	0.0	0.0	0.0
Condenser Pump	0.0	0.0	0.0	0.0	0.0
Other Accessories	0.0	0.0	0.0	0.0	0.0
Auxiliary					
Supply Fans	155,041.5	0.0	6.7	1,587,628.2	5.4
Circulation Pumps	3,494.4	0.0	0.2	35,782.3	0.1
Base Utilities	0.0	0.0	0.0	0.0	0.0
Subtotal	158,535.8	0.0	6.9	1,623,410.6	5.6
ing	295,748.6	0.0	12.8	3,028,472.3	10.1
ptacle	0.0	0.0	0.0	0.0	0.0
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0
Cogeneration	0.0	0.0	0.0	0.0	0.0
Totals	462,484.9	6,310,442.0	100.0	11,378,427.0	38.8
‡		-		•	

PAGE 1

MONTHLY ENERGY CONSUMPTION - ALTERNATIVE 1

G207 - DESTRATIFICATION FAMS

------ MONTHLY ENERGY CONSUMPTION -----

	ELEC	DEMAND	GAS	GAS DMND
	On Peak	On Peak	On Peak	On Peak
Month	(kWh)	(k₩)	(Therm)	(Thrm/hr)
Jan	53,781	165	15,169	38
Feb	48,608	165	13,708	38
March	55,757	165	8,329	38
April	49,965	165	1,826	38
May	25,708	107	0	0
June	25,580	107	0	0
July	23,733	107	0	0
Aug	26,696	107	0	0
Sept	23,604	107	0	0
Oct	25,708	107	0	0
Nov	50,420	165	6,496	38
Dec	52 ,7 93	165	12,541	38
Total	462,354	165	58,068	38

Building Energy Consumption = 24,732 (Btu/Sq Ft/Year)

Source Energy Consumption = 36,326 (Btu/Sq Ft/Year)

Floor Area = 298,599 (Sq Ft)

EQUIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1
- DESTRATIFICATION FANS

------ EQUIPMENT ENERGY CONSUMPTION------

ef							thly Con	•						
um	Code	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	0ct	Nov	Dec	Tota
0	LIGHTS													
	ELEC	24720	22360	26696	23604	25708	25580	23733	26696	23604	25708	23604	23733	295,74
	PK	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.
1	MISC LD												•	
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
2	MISC LD													
	GAS	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
3	MISC LD													
	OIL	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	MISC LD													
	P STEAM	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
5	MISC LD													
	P HOTH20	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
6	MISC LD													
	P CHILL	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1	EQ4003		FC (CENTRIF.	FAN C.V.	•								
	ELEC	26585	24012	26585	25727	0	0	0	0	0	0	25727	26585	155,2
	PK	53.6	53.6	53.6	53.6	0.0	0.0	0.0	0.0	0.0	0.0	53.6	53.6	53
1	EQ4003		FC (ENTRIF.	FAN C.V.	•								
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
1	EQ2001			FIRE TUE		TER								
	GAS	15169	13708	8329	1826	0	0	0	0	0	0	6496	12541	58,0
	PK	37.5	37.5	37.5	37.5	0.0	0.0	0.0	0.0	0.0	0.0	37.5	37.5	37
1	EQ5020		HEAT	WATER C	CIRC. PUR	IP C.V.								
	ELEC	740	668	740	189	0	0	0	0	0	0	325	740	3,4
	ĸ	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1
1	EQ5240		BOIL	ER FORCE	D DRAFT	FAN								
	ELEC	1488	1344	1488	381	0	0	0	0	0	0	654	1488	6,8
	PK	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.

Trane Air Conditioning Economics

By: Trane Customer Direct Service Network

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SOLIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1

- DESTRATIFICATION FANS

ELEC	248	224	248	63	0	0	0	0	0	0	109	248	1,140
PK	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5

UTILITY PEAK CHECKSUMS - ALTERNATIVE 1

G207 - DESTRATIFICATION FANS

Utility ELECTRIC DEMAND

Peak Value 165.4 (kW) Yearly Time of Peak 9 (hr) 1 (mo)

Hour 9 Month 1

Sub Total	0.0	0.00
Heating Equipment		
1 EQ2001 GAS	UBE HOT WATER 5.0	3.02
Sub Total	5.0	3.02
Air Moving Equipment		

1	SUMMATION OF FAN ELECTRICAL DEMAND	53.6	32.41
Sub Total		53.6	32.41
Sub Total		0.0	0.00

Miscellaneous

Lights	106.8	64.58
Base Utilities	0.0	0.00
Misc Equipment	0.0	0.00
Sub Total	106.8	64.58
Grand Total	165.4	100.00

FORNIA TITLE 24 COMPLIANCE - ALTERNATIVE 1

- DESTRATIFICATION FANS

CALIFORNIA TITLE 24 COMPLIANCE REPORT

Weather NameATLANTA.Gross Conditioned Floor Area (sqft)298,599ACM Multiplier1.025

-----ENERGY USE SUMMARY

			PERCENT OF TOTAL	TOTAL SOURCE	ADJUSTED UNIT SOURCE
	ELEC	GAS	ENERGY	ENERGY	ENERGY
	(kWh/yr)	(kBtu/yr)	(%)	(kBtu/yr)	(kBtu/yr-sf)
Primary Heating	7,983.5	5,806,826.5	79.0	6,194,200.5	21.3
Primary Cooling					
Compressor	0.0	0.0	0.0	0.0	0.0
Tower/Cond Fans	0.0	0.0	0.0	0.0	0.0
Condenser Pump	0.0	0.0	0.0	0.0	0.0
Other Accessories	0.0	0.0	0.0	0.0	0.0
Auxiliary					
Supply Fans	155,220.0	0.0	7.2	1,589,456.1	5.5
Circulation Pumps	3,401.9	0.0	0.2	34,835.5	0.1
Base Utilities	0.0	0.0	0.0	0.0	0.0
Subtotal	158,621.9	0.0	7.3	1,624,291.6	5.6
ting	295,748.6	0.0	13.7	3,028,472.3	10.1
Receptacle	0.0	0.0	0.0	0.0	0.0
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0
Cogeneration	0.0	0.0	0.0	0.0	0.0
Totals	462,353.9	5,806,826.5	100.0	10,846,964.0	37.0

MONTHLY ENERGY CONSUMPTION - ALTERNATIVE 1

G207 - LOADING DOCK SEALS

------ MONTHLY ENERGY CONSUMPTION ------

	ELEC	DEMAND	GAS	GAS DMND
	On Peak	On Peak	On Peak	On Peak
Month	(kWh)	(kW)	(Therm)	(Thrm/hr)
Jan	52,297	162	15,406	38
Feb	47,268	162	13,930	38
March	54,233	162	8,365	38
April	48,644	157	2,571	38
May	25,708	107	0	0
June	25,580	107	0	0
July	23,733	107	0	0
Aug	26,696	107	0	0
Sept	23,604	107	0	0
Oct	25,708	107	0	0
Nov	49,053	162	6,761	38
Dec	51,309	162	12,780	38
Total	453,835	162	59,813	38

Building Energy Consumption = 25,219 (Btu/Sq Ft/Year)

Source Energy Consumption = 36,649 (Btu/Sq Ft/Year)

Floor Area = 298,599 (Sq Ft)

ECHAPMENT ENERGY CONSUMPTION - ALTERNATIVE 1
GLOADING DOCK SEALS

----- EQUIPMENT ENERGY CONSUMPTION -----

	Equip						thly Cons	-						
.Im	Code	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	0ct	Nov	Dec	Tota
0	LIGHTS													
	ELEC	24720	22360	26696	23604	25708	25580	23733	26696	23604	25708	23604	23733	295,749
	PK	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8
1	MISC LD													
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	(
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
2	MISC LD													
	GAS	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
3	MISC LD													
	OIL	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
	ISC LD													
	STEAM	0	0	0	0	0	0	0	0	0	0	0	0	(
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
5	MISC LD													
	P HOTH20	0	0	0	0	0	0	0	0	0	0	0	0	I
	₽K	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	MISC LD													
	P CHILL	0	0	0	0	0	0	0	0	0	0	0	0	(
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	EQ4003				FAN C.V.									
	ELEC	25101	22672	25101	24291	0	0	0	0	0	0	24291	25101	146,557
	PK	50.6	50.6	50.6	50.6	0.0	0.0	0.0	0.0	0.0	0.0	50.6	50.6	50.6
1	EQ4003		FC (CENTRIF.	FAN C.V.	•								
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	EQ2001				BE HOT WA	ATER								
	GAS	15406	13930	8365	2571	0	0	0	0	0	0	6761	12780	59,81
	PK	37.5	37.5	37.5	37.5	0.0	0.0	0.0	0.0	0.0	0.0	37.5	37.5	37.
1			HEAT	WATER (CIRC. PUN	IP C.V.								
Ø	ELEC	740	668	728	224	0	0	0	0	0	0	346	740	3,445
		1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
1	EQ5240		BOIL	ER FORCE	D DRAFT	FAN								
	ELEC	1488	1344	1464	450	0	0	0	0	0	0	696	1488	6,930
	PK	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0

Trane Air Conditioning Economics

By: Trane Customer Direct Service Network

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ECHIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1
- LOADING DOCK SEALS

ELEC	248	224	244	75	0	0	0	0	0	0	116	248	1,155
PK	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5

UTILITY PEAK CHECKSUMS - ALTERNATIVE 1

G207 - LOADING DOCK SEALS

------ UTILITY PEAK CHECKSUMS-----

Utility ELECTRIC DEMAND

Peak Value	162.4	(kW)
------------	-------	------

Yearly Time of Peak 9 (hr) 1 (mo)

•			
Hour 9 Month 1			
Sub Total		0.0	0.00
Heating Equipment			
1 EQ2001	GAS FIRE TUBE HOT WATER	5.0	3.07
Sub Total		5.0	3.07
Air Moving Equipment			
1	SUMMATION OF FAN ELECTRICAL DEMAND	50.6	31.16
Sub Total		50.6	31.16
Sub Total		0.0	0.00
Miscellaneous			
Lights		106.8	65 77

Lights	106.8	65.77
-		
Base Utilities	0.0	0.00
Misc Equipment	0.0	0.00
Sub Total	106.8	65.77
Grand Total	162.4	100.00

CALLFORNIA TITLE 24 COMPLIANCE - ALTERNATIVE 1
LOADING DOCK SEALS

CALIFORNIA TITLE 24 COMPLIANCE REPORT

-----ENERGY USE SUMMARY

	CHERG	. 032 30			
			PERCENT	TOTAL	ADJUSTED
			OF TOTAL	SOURCE	UNIT SOURCE
	ELEC	GAS	ENERGY	ENERGY	ENERGY
	(kWh/yr)	(kBtu/yr)	(%)	(kBtu/yr)	(kBtu/yr-sf)
Primary Heating	8,085.0	5,981,312.5	79.8	6,378,909.0	21.9
Primary Cooling					
Compressor	0.0	0.0	0.0	0.0	0.0
Tower/Cond Fans	0.0	0.0	0.0	0.0	0.0
Condenser Pump	0.0	0.0	0.0	0.0	0.0
Other Accessories	0.0	0.0	0.0	0.0	0.0
Auxiliary					
Supply Fans	146,556.5	0.0	6.6	1,500,742.1	5.2
Circulation Pumps	3,445.1	0.0	0.2	35,278.3	0.1
Base Utilities	0.0	0.0	0.0	0.0	0.0
Subtotal	150,001.7	0.0	6.8	1,536,020.5	5.3
ing	295,748.6	0.0	13.4	3,028,472.3	10.1
tacle	0.0	0.0	0.0	0.0	0.0
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0
Cogeneration	0.0	0.0	0.0	0.0	0.0
Totals	453,835.2	5,981,312.5	100.0	10,943,402.0	37.3

PAGE 1

MONTHLY ENERGY CONSUMPTION - ALTERNATIVE 1

G207 - REDUCED LIGHTS

------ MONTHLY ENERGY CONSUMPTION -----

	ELEC	DEMAND	GAS	GAS DMND
	On Peak	On Peak	On Peak	On Peak
Month	(kWh)	(kW)	(Therm)	(Thrm/hr)
Jan	41,477	114	16,590	38
Feb	37,480	114	14,990	38
March	42,544	114	9,260	38
April	38,339	114	2,801	38
May	13,883	58	0	0
June	13,813	58	0	0
July	12,816	58	0	0
Aug	14,416	58	0	0
Sept	12,746	58	0	0
Oct	13,883	58	0	0
Nov	38,888	114	7,627	38
Dec	40,943	114	14,058	38
Total	321,228	114	65,325	38

Building Energy Consumption = 25,549 (Btu/Sq Ft/Year)

Source Energy Consumption = 34,045 (Btu/Sq Ft/Year)

Floor Area = 298,599 (Sq Ft)

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FOULPMENT ENERGY CONSUMPTION - ALTERNATIVE 1 - REDUCED LIGHTS

----- EQUIPMENT ENERGY CONSUMPTION -----

Ref	Equip					···- Mon	thly Cons	sumption						
Num	Code	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	0ct	Nov	Dec	Total
0	LIGHTS													
	ELEC	13349	12074	14416	12746	13883	13813	12816	14416	12746	13883	12746	12816	159,705
	PK	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7
1	MISC LD													
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	MISC LD													
	GAS	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MISC LD													
	OIL	0	0	0	0	0	0	0	0	0	0	. 0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MISC LD													
	P STEAM	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	MISC LD													
	P HOTH20	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	MISC LD	_												
	P CHILL	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	EQ4003				FAN C.V.									
	ELEC	25652	23169	25652	24824	0	0	0	0	0	0	24824	25652	149,773
	PK	51.7	51.7	51.7	51.7	0.0	0.0	0.0	0.0	0.0	0.0	51.7	51.7	51.7
1	EQ4003				FAN C.V.									
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1					BE HOT WA	TER								
	GAS	16590	14990	9260	2801	0	0	0	0	0	0	7627	14058	65,325
	PK	37.5	37.5	37.5	37.5	0.0	0.0	0.0	0.0	0.0	0.0	37.5	37.5	37.5
1	EQ5020				CIRC. PUM									
	ELEC	740	668	740	230	0	0	0	0	0	0	394	740	3,511
	PK	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
1	EQ5240				D DRAFT	FAN								
	ELEC	1488	1344	1488	462	0	0	0	0	0	0	792	1488	7,062
	PK	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0

Trane Air Conditioning Economics

By: Trane Customer Direct Service Network

V 600

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ECHIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1
- REDUCED LIGHTS

ELEC	248	224	248	77	0	0	0	0	0	0	132	248	1,177
PK	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5

UTILITY PEAK CHECKSUMS - ALTERNATIVE 1

G207 - REDUCED LIGHTS

------UTILITY PEAK CHECKSUMS-----

0.0 0.00

57.7 50.42

114.4 100.00

Utility ELECTRIC DEMAND

Misc Equipment

Sub Total

Grand Total

Peak Value 114.4 (kW) Yearly Time of Peak 9 (hr) 1 (mo)		
Hour 9 Month 1		
Sub Total	0.0	0.00
Heating Equipment		
1 EQ2001 GAS FIRE TUBE HOT WATER	5.0	4.36
Sub Total	5.0	4.36
Air Moving Equipment		
1 SUMMATION OF FAN ELECTRICAL DEMAND	51.7	45.21
Sub Total	51.7	45.21
Sub Total	0.0	0.00
Miscellaneous		
Lights Base Utilities	57.7 0.0	50.42 0.00

CALIFORNIA TITLE 24 COMPLIANCE - ALTERNATIVE 1

- REDUCED LIGHTS

CALIFORNIA TITLE 24 COMPLIANCE REPORT -----

-----ENERGY USE SUMMARY

			PERCENT	TOTAL	ADJUSTED
			OF TOTAL	SOURCE	UNIT SOURCE
	ELEC	GAS	ENERGY	ENERGY	ENERGY
	(kWh/yr)	(kBtu/yr)	(%)	(kBtu/yr)	(kBtu/yr-sf)
Primary Heating	8,239.0	6,532,541.5	86.0	6,960,727.0	23.9
Primary Cooling					
Compressor	0.0	0.0	0.0	0.0	0.0
Tower/Cond Fans	0.0	0.0	0.0	0.0	0.0
Condenser Pump	0.0	0.0	0.0	0.0	0.0
Other Accessories	0.0	0.0	0.0	0.0	0.0
Auxiliary					
Supply Fans	149,773.1	0.0	6.7	1,533,680.0	5.3
Circulation Pumps	3,510.8	0.0	0.2	35,950.3	0.1
Base Utilities	0.0	0.0	0.0	0.0	0.0
Subtotal	153,283.9	0.0	6.9	1,569,630.4	5.4
ting	159,704.8	0.0	7.1	1,635,380.9	5.5
eptacle	0.0	0.0	0.0	0.0	0.0
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0
Cogeneration	0.0	0.0	0.0	0.0	0.0
Totals	321,227.7	6,532,541.5	100.0	10,165,738.0	34.8

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MONTHLY ENERGY CONSUMPTION - ALTERNATIVE 1

G207 - CONTINOUS BOILER OPERATION

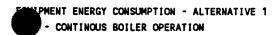
------ MONTHLY ENERGY CONSUMPTION -----

	ELEC	DEMAND	GAS	GAS DMND
	On Peak	On Peak	On Peak	On Peak
Month	(kWh)	(kW)	(Therm)	(Thrm/hr)
Jan	68,311	165	22,920	38
Feb	61,732	165	20,717	38
March	69,553	165	13,004	38
April	63,198	165	2,638	23
May	25,708	107	0	0
June	25,580	107	0	0
July	23,733	107	0	0
Aug	26,696	107	0	0
Sept	23,604	107	0	0
Oct	25,708	107	0	0
Nov	64,541	165	10,332	38
Dec	67,308	165	19,450	38
Total	545,674	165	89,060	38

Building Energy Consumption = Source Energy Consumption = 36,063 (Btu/Sq Ft/Year)

50,109 (Btu/Sq Ft/Year)

Floor Area = 298,599 (Sq Ft)



------ EQUIPMENT ENERGY CONSUMPTION

	_													
	Equip Code		Fab	M			thly Con						•••••	
MUSII	Code	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	0ct	Nov	Dec	Total
0	LIGHTS													
	ELEC	24720	22360	26696	23604	25708	25580	23733	26696	23604	25708	23604	23733	295,749
	PK	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8
1	MISC LD													
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	MISC LD													
	GAS	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	MISC LD													
	OIL	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MISC LD													
	P STEAM	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	MISC LD													
	P HOTH20	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	MISC LD													
	P CHILL	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	EQ4003		FC (FAN C.V.	•								
	ELEC	39877	36018	39877	38591	0	0	0	0	0	0	38591	39877	232,830
	PK	53.6	53.6	53.6	53.6	0.0	0.0	0.0	0.0	0.0	0.0	53.6	53.6	53.6
1	EQ4003		FC (CENTRIF.	FAN C.V.	•								
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	0
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	EQ2001		GAS	FIRE TUE	BE HOT W	ATER								
	GAS	22920	20717	13004	2638	0	0	0	0	0	0	10332	19450	89,060
	PK	37.5	37.5	37.5	23.3	0.0	0.0	0.0	0.0	0.0	0.0	37.5	37.5	37.5
1	EQ5020		HEAT	WATER (CIRC. PU	IP C.V.								
	ELEC	1110	1002	890	300	0	0	0	0	0	0	701	1105	5,108
	PK	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
1	EQ5240		BOIL		D DRAFT	FAN								
	ELEC	2232	2016	1791	603	0	0	0	0	0	0	1410	2223	10,275
	PK	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0

Trane Air Conditioning Economics V 600 By: Trane Customer Direct Service Network PAGE 3 PMENT ENERGY CONSUMPTION - ALTERNATIVE 1 - CONTINOUS BOILER OPERATION ELEC 372 336 299 100 0 0 0 0 0 0 235 371 1,712

0.0

0.0

0.0

0.0

0.0

0.5

0.5

0.5

0.5

PK

0.5

0.5

0.5

0.0

UTILITY PEAK CHECKSUMS - ALTERNATIVE 1 G207 - CONTINOUS BOILER OPERATION

------ UTILITY PEAK CHECKSUMS -----

106.8 64.58

165.4 100.00

Utility ELECTRIC DEMAND

Sub Total

Grand Total

Peak Value 165 4 (kU)

Peak Value 165.4 (kW)		
Yearly Time of Peak 9 (hr) 1 (mo)		
Hour 9 Month 1		
Sub Total	0.0	0.00
Heating Equipment		
1 EQ2001 GAS FIRE TUBE HOT WATER	5.0	3.02
Sub Total	5.0	3.02
Air Moving Equipment		
1 SUMMATION OF FAN ELECTRICAL DEMAND	53.6	32.41
Sub Total	53.6	32.41
Sub Total	0.0	0.00
Miscellaneous		
Lights	106.8	64.58
Base Utilities	0.0	0.00
Misc Equipment	0.0	0.00

CALLEORNIA TITLE 24 COMPLIANCE - ALTERNATIVE 1

CONTINOUS BOILER OPERATION

CALIFORNIA TITLE 24 COMPLIANCE REPORT

Weather Name ATLANTA. Gross Conditioned Floor Area (sqft)..... 298,599 ACM Multiplier 1.025

-----ENERGY USE SUMMARY

			DEDOCUT		
			PERCENT	TOTAL	ADJUSTED
			OF TOTAL	SOURCE	UNIT SOURCE
	ELEC	GAS	ENERGY	ENERGY	ENERGY
	(kWh/yr)	(kBtu/yr)	(%)	(kBtu/yr)	(kBtu/yr-sf)
Primary Heating	11,987.5	8,905,955.0	83.1	9,497,442.0	32.6
Primary Cooling				•	
Compressor	0.0	0.0	0.0	0.0	0.0
Tower/Cond Fans	0.0	0.0	0.0	0.0	0.0
Condenser Pump	0.0	0.0	0.0	0.0	0.0
Other Accessories	0.0	0.0	0.0	0.0	0.0
Auxiliary					
Supply Fans	232,829.7	0.0	7.4	2,384,181.7	8.2
Circulation Pumps	5,108.1	0.0	0.2	52,306.7	0.2
Base Utilities	0.0	0.0	0.0	0.0	0.0
Subtotal	237,937.8	0.0	7.5	2,436,488.3	8.4
Ing	295,748.6	0.0	9.4	3,028,472.3	10.1
Rectacle	0.0	0.0	0.0	0.0	0.0
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0
Cogeneration	0.0	0.0	0.0	0.0	0.0
Totals	545,673.8	8,905,955.0	100.0	14,962,402.0	51.1

By: Trane Customer Direct Service Network

MONTHLY ENERGY CONSUMPTION - ALTERNATIVE 1

G207 - RADIANT HEATERS

------ MONTHLY ENERGY CONSUMPTION -----

	ELEC	DEMAND	GAS	GAS DMND
	On Peak	On Peak	On Peak	On Peak
Month	(k₩h)	(kW)	(Therm)	(Thrm/hr)
Jan	26,456	110	15,662	38
Feb	23,928	110	14,157	38
March	28,282	110	8,427	38
April	24,059	110	2,155	38
May	25,708	107	0	0
June	25,580	107	0	0
July	23,733	107	0	0
Aug	26,696	107	0	0
Sept	23,604	107	0	0
Oct	25,708	107	0	0
Nov	24,318	110	6,641	38
Dec	25,469	110	13,066	38
Total	303,543	110	60,108	38

Building Energy Consumption = 23,599 (Btu/Sq Ft/Year) Source Energy Consumption = 31,599 (Btu/Sq Ft/Year)

Floor Area = 298,599 (Sq Ft)

EQUIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1 - RADIANT HEATERS

----- EQUIPMENT ENERGY CONSUMPTION-----

	Equip Code	Jan	Feb	Man.			thly Cons							
411	code	Jan	reb	Mar	Apr	May	June	July	Aug	Sep	0ct	Nov	Dec	Tota
	LIGHTS													
	ELEC	24720	22360	26696	23604	25708	25580	23733	26696	23604	25708	23604	23733	295,74
	PK	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.8	106.
1	MISC LD													
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
2	MISC LD													
	GAS	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
3	MISC LD													
	OIL	0	0	0	0	0	0	0	0	0	0	0	0	,
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
	MISC LD													
	P STEAM	0	. 0	0	0	0	0	0	0	0	0	0	0	+
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
5	MISC LD													
	P HOTH20	0	0	0	0	0	0	0	0	0	0	0	0	(
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	MISC LD													
	P CHILL	0	0	0	0	0	0	0	0	0	0	0	0	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1 1	EQ4003		FC C	ENTRIF.	FAN C V									
	ELEC	0	0	0	0	0	0	0	0	0	0	•	۰	
	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0.0	0 0.0	0.0
1	EQ4003		FC C	ENTRIF.	FAN C.V.									
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	(
ı	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1 1	EQ2001		GAS	FIRE TUB	RE HOT WA	TER								
	GAS	15662	14157	8427	2155	0	0	0	0	0	0	6641	13066	60,108
	PK	37.5	37.5	37.5	37.5	0.0	0.0	0.0	0.0	0.0	0.0	37.5	37.5	37.5
1 1	EQ5020		HEAT	WATER C	IRC. PIM	P C.V.								
	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	(
-	PK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- 1 i	EQ5240		BOTI	ER FORCE	D DRAFT	FAN								
	ELEC	1488	1344	1359	390	0	0	0	0	0	•	443	1/00	
	PK	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0 0.0	612 3. 0	1488 3.0	6,681 3. 0

Trane Air Conditioning Economics V 600 By: Trane Customer Direct Service Network PAGE 3 SOUIPMENT ENERGY CONSUMPTION - ALTERNATIVE 1 - RADIANT HEATERS ELEC 248 224 226 65 0 0 0 0 0 0 102 248 1,113 PK 0.5 0.5 0.5 0.5 0.0 0.0 0.0 0.0 0.0 0.0 0.5 0.5 0.5

UTILITY PEAK CHECKSUMS - ALTERNATIVE 1 G207 - RADIANT HEATERS

u 1	TILITY	PEAK	C H E C K S U M S

0.0

106.8 96.83

110.3 100.00

0.00

Utility ELECTRIC DEMAND

Misc Equipment

Sub Total

Grand Total

Peak Value 110.3 (kW)
Yearly Time of Peak 9 (hr) 1 (mo)

Hour 9 M	lonth 1			
Sub Total			0.0	0.00
Heating Eq	uipment			
1	EQ2001	GAS FIRE TUBE HOT WATER	3.5	3.17
Sub Total			3.5	3.17
Sub Total			0.0	0.00
Sub Total			0.0	0.00
Miscellane	ous			
Lights			106.8	96.83
Base Util	ities		0.0	0.00

CALIFORNIA TITLE 24 COMPLIANCE - ALTERNATIVE 1

7 - RADIANT HEATERS

CALIFORNIA TITLE 24 COMPLIANCE REPORT

-----ENERGY USE SUMMARY

			PERCENT	TOTAL	ADJUSTED
			OF TOTAL	SOURCE	UNIT SOURCE
	ELEC	GAS	ENERGY	ENERGY	ENERGY
	(kWh/yr)	(kBtu/yr)	(%)	(kBtu/yr)	(kBtu/yr-sf)
Primary Heating	7,794.5	6,010,785.0	85.7	6,406,958.0	22.0
Primary Cooling		-		• • • • • • • • • • • • • • • • • • • •	
Compressor	0.0	0.0	0.0	0.0	0.0
Tower/Cond Fans	0.0	0.0	0.0	0.0	0.0
Condenser Pump	0.0	0.0	0.0	0.0	0.0
Other Accessories	0.0	0.0	0.0	0.0	0.0
Auxiliary					
Supply Fans	0.0	0.0	0.0	0.0	0.0
Circulation Pumps	0.0	0.0	0.0	0.0	0.0
Base Utilities	0.0	0.0	0.0	0.0	0.0
Subtotal	0.0	0.0	0.0	0.0	0.0
hting	295,748.6	0.0	14.3	3,028,472.3	10.1
eptacle	0.0	0.0	0.0	0.0	0.0
Domestic Hot Water	0.0	0.0	0.0	0.0	0.0
Cogeneration	0.0	0.0	0.0	0.0	0.0
Totals	303,543.1	6,010,785.0	100.0	9,435,430.0	32.1
•	•			.,, 40010	

APPENDIX F FIELD SURVEY DATA



One Omega Circle Pureland Industrial Park P.O. Box 336 Bridgeport, NJ 08014 (609) 467-4200

CERTIFICATE OF CALIBRATION

for

EMC ENGINEERS
1950 SPECTRUM CIRCLE
SUITE 312
MARIETTA, GA 30067

Cust PO# 62584 Omega WO# 202992981

Model# HH-23 Serial# T-54474

C A L - 3

OMEGA Process Controls Inc certifies that the above instrumentation has been calibrated to meet or exceed the published specifications. This calibration was performed using instrumentation and standards that are traceable to the United States National Institute of Standards and Technology, and is in compliance with MIL-STD-45662A.

Readings Observed in: Fahrenheit

STANDARD	AS RECEIVED	FINAL CAL
32	32.5	32.0
900	900.8	900.4
1800	1800.4	1800.0

TEST EQUIPMENT	NIST(NBS)
Fluke 8860A Digit Multimeter, S/N 3335023	245516
Analogic AN-3100 DC Standard, S/N 7904379	245516
Gen Res RDS63-A Dec Resistor, S/N 591	241457
Omega TRC-III Ice Point Cell, S/N 003	241457

TEST CONDITIONS

Temp: 23C Rel Hum: 26%

CERTIFIED BY
John L. Howard

Instrumentation Supervisor



EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY BLDG.# ECO 1	JOB PROJ.# SHEET NO. CALCULATED BY: CHECKED BY: DATE:	EMC # 3105.00 of JW		
WA	ALL & ROOF INS	ULATION		
AREAS IN SQ. FEET	NORTH	SOUTH	EAST	WEST
WINDOWS				
OVERHEAD DOORS				
PERSONNEL DOORS				
SKETCH WALL CROSS—SECTION	V		COMPONEN	NTS
BRICK (OA) CONCR	ETE OF VERY	HARD PLASTER	1.OUTSIDE A 2. 3. 4. 5. 6. 7.INSIDE AIR	
SKETCH ROOF CROSS—SECTION	N		COMPONE	ITS
floor Republica	-R-11 32' -AINPACE -R-19 64" - DIOI (EILIA	/ / / G-	1. OUTSIDE A 2 3 4 5 6 7. INSIDE AIR	
PERSONNEL DOOR TYPE	BASEMENT[]			
OVERHEAD DOOR TYPE	SLAB [] CRAWL SPACE []			
COMMENTS: 24 434 f	lon have	R-19 6	1" INSU	· / / / /
			11111	- 4 1 ' 0 N

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EMC ENGINEERS, INC.
DENVER * ATLANTA * GERMANY

BLDG.# (

Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000 Ŕ

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MT CHECKED BY: DATE:

PIPE INSULATION

LOCATION	PIPE DIAMETER	PIPE	FLUID	FLUID TEMP.	AIR TEMP.	INSULATION	INSULATION THICKNESS	INSULATION
WESTEN	,,,		STEAM			1"F.8EKG(ASS 1")	1,, / 51	EXCEL
MECH. FOOM	1/17		DTW 5/R			2"FIBERCIASS 2"	455 2"	FAIR
	,,,,,		HWS/K			FIBERCHSS	,,)	ETCEL
	1-1		CONDENSATE SUILLY	SUILU		FIBELLIASS	///	EXCEL
	11 3 11		C#W S/R			//	1,7	EXCEL
-	•							

BOILER STACKS WELL (NSUCATED. ALL PIPE INSUCATION AVERAGES COMMENTS:

GOOD. VPLグ

EMC ENGINEERS, INC.
DENVER* ATLANTA* GERMANY

101	
BLDG.#	EC02

80	Ft. McPherson/Ft. Gillem Energy Study
PROJ.#	EMC # 3105.000
SHEET NO.	ዎ
SALCULATED BY:	MO
CHECKED BY:	
ATE:	26/2/1

WINDOWS SURVEY

		T		1	1			7	
	48 X 84								
WINDOW	BLWDS								
GLASS SHADING									
ORIENTATION	5								
FRAME	METAL								
TYPE-SLIDING FIXED, CASEMENT	CASEMENT								
WINDOW SINGLE/DOUBLE PANE	SINGIE								
WOUNIW	Ž.								

COMMENTS:

EMC	ENG	INEEF	RS,	INC.
DEMVE	R * ATI	ΔΝΤΔ :	* GEF	YMAMS

BLDG.#	101
ECO 3	

JOB	Ft. McPherson/Ft. Gillem Energy Study		
PROJ.#	EMC # 3105.000		
SHEET NO.	OF		
CALCULATED BY	JW		
CHECKED BY:			
DATE:	1/2/92		

WEATHERSTRIPING AND CAULKING

	DOOR\ WINDOW	CONDITION OF W.S./CAULK	INFILTRATION	ORIENTATION	DIMENSIONS (INCH)	#
0	D	NONE	#16.4	SOUTH	39×84	//
	W	SEALED PAINT	LOW	SOUTH	48 × 84	
(2)	D	NONE	VERY HIGH	5 W	60x84 60x84	1
3	D	POOR	HIGH	MAIN EAST ENTRANCE	60×84	3
9	W	NEAR PAINT	MED	I EAST INFO. ADMIA	48X84 60X84	
	D	NONE	MED	NW	40x84	/
	100P					

COMMENTS: DOOR #45 & AIR CAP ON BUTTING

WINDOW IN DEPUTY COMMANDER (C-WE) HAS FAULTY LOCK ON EAST WALL CAUSING HIGH INFILTRATION. EDOUBLE DOOR DOES NOT SHUT COMPLETELY LEAVING 4-2" AIR GAP IN MIDDLE AND TOP.

3 FRONT DOORS HAVE VESTIBULE BUT NEITHER OUTSIDE NOR INTERNAL DOORS ARE SEALED CAUSING HIGH INFILTRATION. ALL 3 INTERNAL DOORS HAVE 2" AIR GAT ON BOTTOM. (9) TWO WIN DO NO IN THIS ROOM ARE SPRUNG OPEN AND DHAVE BEEN TAPED SHUT. THIS IS THE CASE IN MANY OTHER LOOMS HIWEVER, NO ONE HAS TAPED THEM UP,

EMC ENGINEERS, INC.	JOB	Ft. McPherson/Ft. Gillem Energy Study		
DENVER * ATLANTA * GERMANY	PROJ.#	EMC # 3105.000		
	SHEET NO.	OF .		
	CALCULATED BY:	JW		
	CHECKED BY:			
BLDG.# // /	DATE:	1/2/97		
ECO 4		• ,		
DOMESTIC HOT W	/ATER			
FAUCET LOCATION		WATER TEMPERATURE		
WEST BASEMENT MECH. ROOM		150°F		
WEST BASEMENT MECH. ROOM 15 floor WEST MEN'S ROOM		141°F		
		:		
PROBLEMS:				
	- Company			
COMMENTS:				
	-14-7-11			

EERS, INC.		JOB		Ft. McPhereson/Ft. Gillem Energy Study			
DENVER * ATLANTA * GERMANY PROJECT NO. EMC # 3105							
		CALCULATED BY:	CS				
		CHECKED BY:	100				
101		DATE:	1-1-9	2			
	MOTOR	S 					
	HP 2	PH	3	RPM	1735		
PUL 145 PT DR7	026 VYOLTS	208/46	O AMPS_	6/3	_		
				то	2400		
Marathon Electric	REQU	IRED HR.		ТО			
145 P	EFF.						
n AHU I	COMME	ENTS 4 Th	FLOOR_				
7.	HP 7 1/	Z PH	_3	·RPM	1745		
6808959904	VOLT	200 S	AMPS	24,4			
	PRES	SENT HR.	0	то	2400		
WESTINGHOUSE	REQ	UIRED HR.		то			
2/3 <i>T</i>	EFF.						
ON AHU 2	COMM	ENTS					
3	HP (PH	_3_	RPM	1730		
3N6598	VOL	rs 20%/46	AMPS	15/7,	3_		
GATTON TRIVO	LT REC	QUIRED HR.		TO			
KIRH +	EFF	: 62.5°	16				
		02.5					
	ANTA * GERMANY 101 PUL 145 PT DAT Marathon Electric 145 P N AHU Z 6808959904 WESTINGHOUSE 213T ON AHU 2 3 3N6598 GAYTON TRIVO	MOTOR MOTOR HP 2 PUL 14.5 PT DR 7026 UVOLTS PRES Marathon Electric REQUIRED REQUIRED PRES MESTINGHOUSE PRES WESTINGHOUSE REQUIRED PRES PRES	## PROJECT NO. SHEET NO. SHE NO. SHEET NO. SHE SHEET NO. SHEET NO. SHEET NO. SHEET NO. SHEET NO. SHEET NO. SHE SHE NO. SHE SHE NO. SHE SHE NO. SHE SHE SHE NO. SHE SHE SHE NO. SHE SHE SHE SHE SHE. SHE SHE SHE SHE SHE SHE SHE. SHE	## PRESENT HR. O ## SET NO. ## SHEET NO. ## SHEET NO. ## CALQUATED BY: ## CALQU	ANTA * GERMANY ANTA * GERMANY		

	INEERS, INC. LANTA * GERMANY		JOB PHOJECT NO. SHEET NO. CALCULATED BY: CHECKED BY: DATE:	Ft. McPhers EMC # 3105		m Energy Study
CO 5	4th FLOOR	— Motof	RS			
MOTOR #		HP 2	- PH	3	RPM	1735
MODEL#	PVL 145TTDR7076	SDC VOLTS	208	AMPS _	6	
SERIAL#		PRES	ENT HR.		то	
MFG	MARATHON	REQU	IIRED HR.		то	
FRAME	145 T	EFF.	82.5			
DESCRIPTIO	ON AHU I (4Th	-LOOR) COMME	NTS			
MOTOR #		HP	PH		RPM	
MODEL#		VOLT	s	AMPS		
SERIAL #		PRES	SENT HR.		ТО	
MFG		REQU	JIRED HR.		то	
FRAME		EFF.				
DESCRIPTION	ON	COMM	ENTS			
MOTOR #		HP 5	PH	3	RPM	1730
MODEL#	3N659	VOL	rs <u>200</u>	AMPS	15	
SERIAL#			SENT HR.		_ то	
MFG	DAYTON	REC	UIRED HR.		то	
FRAME	K+84T	EFF	•			
1	TION AMU-3 CATH FO					

MC ENGINEERS, IN ENVER * ATLANTA * GERM			JOB PROJECT NO.	Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000				
161	161			SHEET NO. CALCULATED BY: CHECKED BY:				
LDG.#		_		DATE:	1-1-	92		
		M	IOTORS	· · · · · · · · · · · · · · · · · · ·				
MOTOR # 4-3317	<i>1</i> 10000 3	HP_	1,0	PH	3_	RPM	1745	
MODEL# 8-33/20	60-03		VOLTS	200-20	AMPS	3,8		
SERIAL #			PRESEN	NT HR.		то	-	
MFG CENT	URY		REQUIR	RED HR.		то		
FRAME <u>L143</u>	T		EFF.					
DESCRIPTION AHU	- 4	•	COMMEN	тв <i>SU М</i> /	MER	TIME		
MOTOR #		HP_		PH		RPM		
MODEL#			VOLTS		AMPS			
SERIAL #			PRESE	NT HR.		то		
MFG			REQUI	RED HR.		то		
FRAME			EFF.					
DESCRIPTION			COMMEN	NTS				
MOTOR #				PH		RPM		
MODEL #			VOLTS		AMPS		war water	
SERIAL #	444		PRESE	ENT HR.		_ то		
MFG			REQU	IRED HR.		то		
DESCRIPTION			COMME	NTS				

	NEERS, INC. ANTA * GERMANY			JOB PROJECT NO.	Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000			
_DG.#	101		,	SHEET NO. CALCULATED BY: CHECKED BY: DATE:	0F			
DO 5		- М	OTORS	DATE.		-		
OTOR#		HP_	1/4	_ PH	1	RPM	1725	
MODEL#			VOLTS	115	_ AMPS _	5		
ERIAL#	317P 216		PRESENT	ΓHR.	0	то	2400	
MFG (WESTINGHOUSE FEDERAL PUMP CORP.		REQUIRE	ED HR.		то		
RAME	S856C		EFF.					
DESCRIPTION	N DHW CIR.		COMMENT	S TEMP	CONTROL	9ET @	160°F	
MQTOR #	২	HP	10	PH	3	RPM	1745	
MODEL #	JVK 21577DR 7343D-	FIW	VOLTS	208	AMPS	/29		
SERIAL#			PRESEN	IT HR.	<u>ø</u>	то	2400	
MFG	MARATHON		REQUIR	ED HR.		то		
FRAME	215 JM		EFF.					
DESCRIPTIC	ON CWP		COMMEN	rs				
			\angle					
MOTOR #	3	/HP_	10	PH	3	RPM	1745	
MODEL#	JVK215T TO#7343DF	iw_	VOLTS	20%	AMPS	29		
SERIAL #			PRESE	NT HR.	0	то	2400	
MFG	MARATHON		REQUII	RED HR.		то		
FRAME			EFF.					
DESCRIPTI	ON CWP		COMMEN	1TS				

EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY		JOB	Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000				
PENVER " ATLANTA " GERMANY		PROJECT NO. SHEET NO.	EIVIO # 3103	OF			
		CALCULATED BY:					
BLDG.#		CHECKED BY: DATE:					
ECO 5				-			
	MOTORS	; 					
MOTOR# 4	HP_ 3 0	PH	3	RPM	1765		
MODEL# FM 286TST DR7	7361CBWFZ VOLTS	200	AMPS _	85	_		
SERIAL #	PRESE	NT HR.		то	2400		
MFG MARATHON	REQUIF	RED HR.		то			
FRAME 286 TS	EFF.						
DESCRIPTION HWP #	COMMEN	TSRUN	INING.				
MOTOR #	нр3с	2 PH	3	RPM	17		
MODEL# FM Z>ST DK	27361CBWFZVOLTS		AMPS _				
SERIAL #	PRESE	NT HR.		то			
MFG MARATHON	REQUI	RED HR.		то			
FRAME 286TS	EFF.						
DESCRIPTION HWP #2	COMMEN	NTS NOT	RUNNIN	10.			
MOTOR # 6	HP 1/3	PH		RPM	1725		
MODEL # 555 JXDYD - 20							
SERIAL #		ENT HR.		то			
MFG EMERSON	REQU	IRED HR.		то			
FRAME	EFF.						
DESCRIPTION HWP # 3	COMME	NTS NEW	ADDITION	/			
		NO 1	NOTOR TO	PUMP	coupelne		

ERMANY	PROJECT NO.	EMC # 3105.000					
	SHEET NO.	OF					
	CALCULATED BY:	JW					
	CHECKED BY:			···			
	DATE:	1/2/92					
	10+ HP M	MOTORS					
	MEASL	JRED					
44 1 / MARTIN							
# 1 (NOK179)	_	PHASE A	PHASE B	PHASE C			
	10/45	3.8					
	KVAH	200					
+11041	κ/Δ	9.7					
111010							
- TT NR 7343D- F/L	, KW	4,3					
77 - 17 7 - 0 1 7 0	Z						
	PF	75.1					
M	HP						
		225	203				
	VOLTS	202	707				
_	AMDO	16	15.7				
	AIVIFS	' •					
TO	PH						
		10 11/40 0	-0				
ТО			.CS				
	Δ,	nps 29					
0-4- / 5			DUACE D	PHASE C			
# 2 (300 174)	<u>) </u>	PHASE A	PHASE D	FIASE			
	KA/AD	4.1					
THONI	KVA	3.9					
17100	_	42					
577 DR 7343 DF/W	KW	T.)					
		773					
	PF	12,5					
		204	204 -	 			
	HP			 			
	VOLTS	16.7	16.8 -	-			
	40610	7 4					
			l l	1/			
	AMPS			4			
	AMPS			<			
то	AMPS PH			2			
то	PH	rs 208					
_	PH	75 208 183 29					
то	PH	1 ps 29		2			
то	PH	75 208 1ps 29 4 3		2			
	TO T	10+ HP N *MEASL # / (NORTH) KVAR KVA KVA STT DR 73430- F/W MP VOLTS AMPS TO PH TO CAL STT DR 73430F/W KVA KVA KVA KVA KVA KVA KVA KV	10+ HP MOTORS *MEASURED* ## (NORTH) PHASE A KVAR 3.8 THON KVA 9.7 571 DR 7343D-FIW KW 4.3 PF 75./ M	10+ HP MOTORS *MEASURED* # (NORTH)			

JOB

EMC ENGINEERS, INC.

Ft. McPherson/Ft. Gillem Energy Study

EMC # 3105.000

DENVER * ATLANTA * GERMANY

BLDG.# \O(

EC0 15

JOB	Ft. McPherson/Ft. Gillem Energy Study
PROJ.#	EMC # 3105.000
SHEET NO.	OF
CALCULATED BY	:
CHECKED BY:	
DATE:	

LIGHTING

ROOM #	# OF FIXTURES		1	BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
65B	Ģ	4	34	F	210	N	72	1	台人
65c	8	4	34	F	OFF	7	N	0	N
65D	12	4	34-	F	لهرد	4	N		N
76		4	34-	F	OFF	4	N	1	N
86	3季	2	34	F	ON	7	Y		Y
88A	1	4	34	F	ON	4	4	1	Y
88	-	Z	34	F	01	4	N	1	1
77	8	4	34-	F	ON	Ý	4		Y
85	1	2	34	F	OFF	Y	4	1	N
83	1	<u>ス</u> こ	8'	F F	01/	> Y	Y	1	Y
87	1 2	2 2	UTUBE	L P	07 /	Ϋ́	\(\)	1	Y
78	4	4	34	F	DFF	4	7	2	N
79	2	4	34	F	ON	7	4	0	4
80	5	4	34	F	ON	4	1		N
81		4	34	F	OFF	4	Y		N
82		4	34	F	OFF	4	7	1	N
84	1	4	34	F	OFF	1	\	1	N
83	8	4	34	F	OFF	Y	Y	l	N

#	OF	EXIT	SIGNS	-	

COMMENTS:

70

JOB	Ft. McPherson/Ft. Gillem Energy Study
PROJ.#	EMC # 3105.000
SHEET NO.	OF
CALCULATED BY	: CS
CHECKED BY:	
DATE:	1-7-92

LIGHTING

ROOM #	# OF FIXTURES			BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
218	17	4	34	F	ow	Y	W	2	N
220	12	28		F	on	Y	N	2	4
222	1	4	34	F	on	Y	N	1	Y
223	1	2	34	F	on	Y	N	1	Y
225	18	4	34	F	OF F	Y	N	44	N
227	10	4	34	F	on	Y	N		N
228	16	4	34	F	ON	4	V	3	iv
229	3	4	34	F	6NI	Y	N		Y
230	2	2	34	F	OFF	Y	N	1	N
232	1	4	34	F	DFF	Y	N		N
236	4	4	34	F	on	4	N		N

#	OF	EXIT	SIGNS	_	M
••	•				

PROJ.#	EMC # 3105.000	
SHEET NO.		OF
CALCULATED BY:	: (5	
CHECKED BY:		
DATE:	1-7-92	

JO8

Ft. McPherson/Ft. Gillem Energy Study

BLDG.# 10/ EC0 15

LIGHTING

ROOM #	# OF FIXTURES	i e		BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
336	3	4	34	F	on	4	N	1	* 4
339	5	4	34	F	ON	4	N	1.	N
341	2	4	34	F	on	4	\$N	3404 /2	Y
34	2	4	34	F	on	4	N	1	N
34 2	4	4	34	F	on	4	Y	1	N
345	3	4	34	F	on	N	Y	0_	7
201	64	4	34	P	on	4	N	12	N
204	3	4	34	F	bW	4	N	1	\ <u>\</u>
207	3	4	34	F	ow	Y	#N	/	N
209	3	4	34	F	ON	Y	N		N
210	2	2	34	/=	ON	<u> </u>	N		Y
211	2	4	34	F	on	Y	N		Y
212		4	34	F	on	N	N	0	Y
213		4	34	F	on	Y	N	3	<u>Y</u>
2/4	14	4	34	1=	OW	Y	N	3	N
215	2	4	34	F	on	N	N	0	Y
216	4	4	34	F	OFF	l y	Y		N

#	OF	EXIT	SIGNS	_	NU
---	----	------	-------	---	----

BOL	Ft. McPherson/Ft. Gillem Energy Study							
PROJ.#	EMC # 3105.000							
SHEET NO.	OF							
CALCULATED BY	: <u> </u>							
CHECKED BY:								
DATE	1.1.52							

BLDG.# (C) | EC0 15

LIGHTING

ROOM #	# OF FIXTURES	LAMPS/ FIXTURE		BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR		UNOCC LIGHTS ON
	4	2 (u)	40	F	ON	4	N	WORK W/ OTHERS	N
433	2	1	60	J	OFF	Y	N	1.	N
301	1	4	34	<i> </i> =	OFF	Y	N	1	N
303	1	4	34	<i>[=</i>	ON	Y	Y	1	Y
305	2	4	34	F	OFF	4	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	1	N
309	16	4	34	F	on	Y	N	2	\$N
311	1	4	34	F	ON	4	を変	1	Y
3/3	3	4	34	F	ON	Y	N		N
316	6	4	34	F	ON	Y	Y	1	Y
317	5	4	34	F	on	7	N		N
320	1	2	34	F	on	Y	Y	1	Y
322	1	4	34	F	OFF	Y	V		N
324	1	28		F	OFF	N	N	pal(=D	N
328		28'		F	OFF	N	N	out out	N
330	68	4	34	F	on	Y	N	粤门	N
331		4	34	F	ON	7	Y	1	14
334		2	34	F	OFF	17	N		N

OF EXIT SIGNS - NU III

BLDG.#	10
EC0 15	

JOB	Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000						
PROJ.#							
SHEET NO.	OF						
CALCULATED BY	: (5						
CHECKED BY:							
DATE:	1-7-92						

LIGHTING

					ON/OFF				UNOCC
ROOM #	# OF	LAMPS/	WATTS/	BULB TYPE	DURING	SWITCH	GOOD FOR	NO. OF	LIGHTS ON
	FIXTURES	FIXTURE	BULB		SURVEY	YES/NO	OCC. SENSOR	SWITCHES	ON
401	25	4	34	F	on	Ĭ.	N	6	N
	1	2(4)	40	F	OW	Y	N	1.	N
403	7	4	34	F	on	Y	N	1	Y
405	3	4	34	F	OFF	V	Y	1	N
407	1	1	75	Ţ	OFF	Y	N	1	N
409	7	4	34	F	on	1	N	1	N
411	\$5	2 (d	40	F	ON	Y	N	2	FN
413	2	4	34	F	ON	4	N	/	Y
4/4	4	4	34	F	OFF	4	WY	1	N
415									
416	3	4	34	F	OFF	4	Y	l .	N
4/7									
419	2	1	60	I	OFF	4	V	11-	N.
422	3	4	34	F	ON	Louis	N		1
423	2	28		F	OFF	NOT FIN	1 2 Y		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
425	5 1	21	5,	F	OFF	Y	N	1	\mathcal{N}
427		4	34	F	6N	Y	<u> </u>		Y
429	٠, .	7 4	34	F	ow	4	N_{\perp}	12	<u>N</u>

# OF EXIT SIGNS -	Ш
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ĖMC	ENGINEERS,	INC.
DENVE	R * ATLANTA * GE	RMANY

JO8	Ft. McPherson/Ft. Gillem Energy Study						
PROJ.#	EMC # 3105.000						
SHEET NO.	OF						
CALCULATED BY:	JW						
CHECKED BY:							
DATE:	1/7/92						

BLDG.# // / / EC0 15

LIGHTING

ROOM #	# OF FIXTURES			BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
252	6	4	34	F	0N	У	N	3	Y
1	1	2-4		F	OFF OFF	X	\mathcal{N}		\mathcal{N}
253	1	1	60	l .	OFF	У	\sim	/	\mathcal{N}

# OF EXIT SIGNS -	
COMMENTS:	

 $\neg \lor \lor$

JOB	Ft. McPherson/Ft. Gillem Energy Study
PROJ.#	EMC # 3105.000
SHEET NO.	OF
CALCULATED B	r. JW
CHECKED BY:	
DATE:	1/7/92

BLDG.# /// / EC0 15

LIGHTING

ROOM #	# OF FIXTURES	5	BULB	BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
2 33 2	2	4	34	F	OFF	Y	Y		No
234	9	4	34	F	ON	Y	\sim	2	\mathcal{N}
235	3	4	34	۴	ON	Υ	\sim	3 1	\mathcal{N}
237	16	4		F	ON	У	N	2	\mathcal{N}
238	4	4	34	F	ON	У	\sim		Y
239	5	4		F	ON	У	N	2	Y
240	Ì	4		F	ON	У	N	/	У
241	1	24		F	OFF	Y	N	1	N
242	1	4		F	ON	Y	N	1	Y
243	2	4		F	ON	Y	\mathcal{N}	/	Y
244	1	2U		F	ON	Y	N	1	Y
245	/	1	60	I	OFF	Y	\mathcal{N}	(\$W
246	3	4		F	ON	У	\mathcal{N}	1	N
247	3	4		F	ON	Y	N	1	N
248	4	4		F	ON	Y	N	1	Y
249	3	4		F	ON	У	N	/	N
250	8	4		F	ON	У	\mathcal{N}	2	\mathcal{N}
251	5	4	34	OF	ON	У	N		N

# OF EXIT SIGNS -	
COMMENTS:	

EMC	ENGINEERS,	INC.
DENVE	R * ATLANTA * GE	RMANY

	10/
BLDG.#	10/
EC0 15	

JOB	Ft. McPherson/Ft. Gillem Energy Study
PROJ.#	EMC # 3105.000
SHEET NO.	OF
CALCULATED BY	: JW
CHECKED BY:	
DATE:	1/7/92

LIGHTING

	ROOM #	# OF FIXTURES	1		BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
	3 33	9	4	34	F	ON	У	\sim	3	· N
	335	2	a	34	F	ON	Y	N	1	Y
	337	5	4	34	F	ON	Y	\sim	1	N
	338	2	4		F	0 N	У	У	1	N
	340	3	4		F	ON	Y	ØN	之341	y
	344	2	4		F	0~	N	N	0	Y
	200	5	4		F	ON	У	N	(N
	202	3	4		F	ON	Y	У	/	У
	203	3	4		F	ON	Y	Y	1	У
	205	3	4		F	ON	У	У	1	Y
delarp	206	5	4		F	ON	À	X	1	N
'		-15	4		F	ON	X	₩	4	A-
	217	2	4		F	OFF	У	y	/	N
:	1219	63	4	34	3 F	ON	У	\sim	8	N
	221	1	1	40	I	OFF	Y	\sim	1	N
	224	4	4	34	F	ON	У	<i>N</i>	1	N
	226	8	4	34	F	ON	Y	N	2	N
	230	7	4	34	F	ON	Y	N	2	N

OF EXIT SIGNS -

COMMENTS:

701

BLDG.#	101

EC0 15

JOB	Ft. McPherson/Ft. Gillem Energy Study
PROJ.#	EMC # 3105.000
SHEET NO.	OF
CALCULATED BY	: JW
CHECKED BY:	
DATE:	1/7/92

LIGHTING

ROOM #	# OF FIXTURES			BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
300	0 5	4	34	F	ON	Y	N	2	\mathcal{N}
302	6	4		F	ON	Y	\mathcal{N}	1	N
304	2	2	34	F	ON	Y	X_	1	Y
306	9	4	34	F	ON	У	N	2	\sim
307	2	4	34	F	ON	Y	У	1	У
308	98	4	34	F	ON	У	\sim	8	ØN
310	2	4		F	ON	À	У	1	N
3104	10	4		F	ON	X	N	2	N
3313	#66	4	34	F	ON	X	Y	1	Y
3/8	2	4	34	F	ON	У	BY	/	Y
319	000	PIED							
350	1	4		F	ON	7	Ø N	1	Y
323	85	4	34	F	ON	У	\sim	10	N
325	3	4		F	OFF	Y	Y	1	N
326	2	4		F	ON	Y	Y	/	Y
32	7 2	4		F	ON	У	У	1	Y
32°		4		F	ON	Y	У	/	$ \mathcal{N} $
33/	4	4		F	ON	Y	M Y	1	N

#	OF	EXIT	SIGNS	-	
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COMMENTS:

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321

BLDG.#	101	
EC0 15		-

JOB	Ft. McPherson/Ft. Gillem Energy Study							
PROJ.#	EMC # 3105.000							
SHEET NO.		OF						
CALCULATED BY	JW	-						
CHECKED BY:								
DATE:	1/7/92							

LIGHTING

ROOM #	# OF FIXTURES			BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
403	6	2	8,	F	ON	У	N	2	\sim
400	2	4	34	F	ON	Y	\sim	1	N
402	10	4		F	ON	У	\sim	2	N
406	2	4		F	OFF	Y	У	(\mathcal{N}
404	2	4		F	ON	У	У	1	N
408	2/	3/2	8'	F	OFF	У	N	1	N
410	8	4		F	0~	У	N	1	\mathcal{N}
412	18	4		F	ON	У	N	5	V
418	LOCKE	i .							
420	4	4		F	ON	Y	У	/	Y
421	3	2	34	F	ON	Y	\sim	/	У
424	1	/	200	I	OFF	NIN	" MY	0	\mathcal{N}
426	5	4		F	0 N	Y	\mathcal{N}	1	N
428	5 2/3	2-4	34	F	OFF	У	У	/	N
430	4	4		F	ON	X	У	/	N
431	3	Z	34	F	ON	У	N	1	N
432	. 3	2	34	F	8~	y	N	1	N
								•	

BLDG.# / / / / / EC0 15

JOB	Ft. McPherson/Ft. Gillem Energy Study							
PROJ.#	EMC # 3105.000							
SHEET NO.	OF							
CALCULATED BY	: J <i>W</i>							
CHECKED BY:								
DATE:	1/3/92							

LIGHTING

					ON/OFF	01487011	GOOD FOR	NO. OF	UNOCC LIGHTS
ROOM #	# OF FIXTURES			BULB TYPE	DURING SURVEY	SWITCH YES/NO	OCC. SENSOR	t i	ON
39	/	/	150	I	ON	Y	Y	1	Y
25		4	34	F	0 N	У	у	/	У
24	18	4	34	F	ON	Y	NO	7	NO
26	D 6	4	34	F	UN	У	У	1	NO
23	7/1	4/4	34/20	F	ON	Y	У	/	NO
22	9'	4	34	F	ON	У	MNO	/	NO
46	4	4	34	F	ON	Y	У	1	NO
46 A	1	/	150	I	ON	Y	Y	1	,X
-									
									<u></u>

# OF EXIT SIGNS -		
		1 N
COMMENTS:		

EMC	ENGINEERS,	INC.
DENVE	R * ATLANTA * GE	RMANY

JOB	Ft. McPherson/Ft. Gillem Energy Study							
PROJ.#	EMC # 3105.000							
SHEET NO.	OF							
CALCULATED BY	- <i>ש</i> ע							
CHECKED BY:								
DATE:	1/3/97							

BLDG.# // / / EC0 15

LIGHTING

ROOM #	# OF FIXTURES		1 1	BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
75	8	4	34	F	ON	Ø \	NO	[NO
74	6 8	4	34	F	ON	Y	NO	1	Ø NO
74-A	/	4	34	F	OFF	У	YES	/	NO
73-A	/	4	34	F	OFF	У	YES	1	NO
73	10	4	34	F	ON	Y	NO	1	NO
72	4	4	34	F	OFF	У	NO	1	No
71	12	4	34	F	ON	Y	NO	1	NO
HALL-1	8	4	34	F	ON	Y	NO	7	NO
67	2	2	8'	F	OFF	У	NO	1	No
70	2	4	34	F	ON	У	NO	/	NO
69	3	4	34	F	ON	У	YES		NO
6/	6	4	34	F	ON	Y	NO	2	NO
68	/	2	8'	F	ON	Y	NO	/	NO
59	1	1	150	I	OFF	У	NO	/	NO
59	2	2	34	F	OFF	Y	NO	/	No
60	2	4	34	F	OFF	У	NO	/	No
	20	4	34	F	ON	Y	NO	2	NO
58	6	4	3 4	F	ON	Y	No	1	No

#	OF	EXIT	SIGNS	-	
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COMMENTS:

0W

	101
BLDG.#	101
EC0 15	

JOB	Ft. McPherson/Ft. Gillem Energy Study						
PROJ.#	EMC # 3105.000						
SHEET NO.	OF						
CALCULATED BY:	I W						
CHECKED BY:							
DATE:	1/3/92						

LIGHTING

ROOM #	# OF FIXTURES			BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
57A	/	4	20	F	0 FF	Y	NO	/	NO
57	/	2	34	F	OFF	Y	NO	1	No
56	2	4	34	F	OFF	У	NO	1	NO
54	3	4	34	F	ON	γ	NO	1	NO
55	3	4	34	F	OFF	Y	YE S	/	NO
53	4	4	20	F	ON	У	AYES	/	NO
53A	SAME	1+							
53B	3	4	34	F	ON	У	EN XES	1	y e
51	B 2	4	34	F	ON	У	XINO	1	
52	(4	34	F	ON	NO	YE5	0	NO
50	3	4	34	F	ON	EN O	YE S	0	YE5
49	3	4	34	F	ON	YES	NO	1	YES
48	12	4	34	F	ON	YES	NO	2	YES
47	6	Y	34	F	OFF	y	У	1	NØ
45	2	2	8/34	F	OFF	Y	DYES	1	ND
100 to	4	4.	34	F	ON	У	XES		NO
4-43	1	1	150	I	ON	У	NO	/	YES
34	4	4	34	F	ON	У	YES	1	NO

#	OF	EXIT	SIGNS	_	

COMMENTS:

JW

EMC	ENG	GINE	ERS,	INC.
DENVE	R * A	TLANT	A * GE	RMANY

JOB	Ft. McPherson/Ft. Gillem Energy Study
PROJ.#	EMC # 3105.000
SHEET NO.	OF.
CALCULATED BY:	
CHECKED BY:	
DATE:	

BLDG.# [0] EC0 15

LIGHTING

ROOM #	# OF FIXTURES			BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
71	12	4	34	F	0	7	N		7
68	1	2	EN SE	. F	0	4	7	1	1
6	8	24	34	F	0	4	FN.	2	N
50	2	4	34	F	OFF	4	Y		N
594			150	INC	0	4	4		N
59/10	1 2	2	34	F	0	4	Y		N
2!	ZO	1	34	F	0	1	N		N
21	10		34	F	OF	= Y	N		F N
40	2	\	34	F	0	Y	4		1
41	ì	4	34	F	0	Y	4	1	Y
27	12		34	F	0	4	智N		Y
27A	2	2	34	F	0	Y	I IV		N
Z8	3	2	3A-	F	0	Y	N		Y
									•

# OF EXIT SIGNS -	
COMMENTS:	

JOB Ft. McPherson/Ft. Gillem Energy Study
PROJ.# EMC # 3105.000

SHEET NO. OF

CALCULATED BY:
CHECKED BY:
DATE:

BLDG.# 101 EC0 15

LIGHTING

	ROOM#	# OF FIXŢUŖES		1	BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
	8	423	Z	TUBE	FL	OFF	4	N	1	N
	2A	4	4	34	FL	017	11	Y	0	Y
	26	4	4	34	FL	011	\mathcal{M}	7	0	7
	28	2	.4	34	F_	011	N_{\perp}	7	0	/ /
>	5A	2	4	34	FL	ON	1	Ý	1	NS
	5B	2	4	34	FL	ON		4		N\$
	10	4-	4	34	FL	ON	4	4		Y
	34	5	4	34	FL	01)	<u>\</u>	,		N
	38		4	=4-	FL	01/	7	1	\	4
	19	3	2	UTUR	E FL	ON	1	Y	(Y
	13	52	1	HAC.	HALAGN ZV-75W	OFF	SPE	IAL LIG	ItT CO	NTEOLS
	.4	3	2	8'	FL	DFF	7	N	1	N
	20		2	34	FL	ON	4	N	1	Y
	16		2	34	4	02	Y	Y	1	Y
	15	Z	4	34	FL	ON	Y	Y	1	Y
	144	-	4	34	- FL	OFF	4	N	1	N
	14B	2	4	34	·FL	OFF	- , 4	2	1	N
	65A	- 3	4	34	FL	OFF	NA	岁十	0	超少

OF EXIT SIGNS - 1

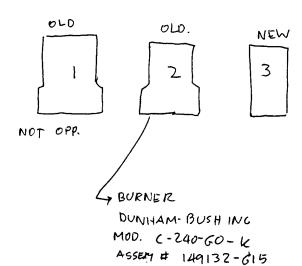
) n

Denver • Colorado Springs • Atlanta • West Germany

FL Gillem BLDG. 101

JOB	
SHEET NO.	OF
CALCULATED BY	DATE
CHECKED BY	DATE
SCALE	

MECH. ROOM



N.GAS

5250 MBTUH SER 7804-678862

- , PACIFIC STEEL BOILER CORP.
- 2 RAY HUSKY PACKAGED BOILER NUMBER 125EP; 1963 HEATING SURFACE 525 FEZ
- BRUNHAM CORP.

 BOILER# FF-505

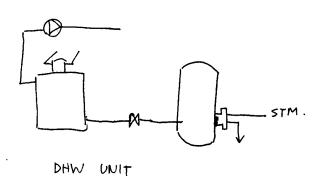
 SERIAL# 7581959

 OUTPUT 786 MBH

 STEAM SQ.FL 2457

 STEAM MBH 589.6

 STEAM 15 PS1



	JOB	
E M C ENGINEERS, INC.	SHEET NO.	OF
Denver • Colorado Springs • Atlanta • West Germany	CALCULATED BY	DATE 1/2/92
WINDOW TROUBLE SPOTS	CHECKED BY	DATE
RLDG 101	SCALE	

- 2 T FLOOR SOUTH COMMANDING GENERAL'S OFFICE
 WINDOW ON SOUTH WALL IS CRACKED BUT COW INFILTRATION
 ZWINDOWSON EAST WALL HAS HAVE HIGH INFILTRATION, ONE
 WITH BLOKEN FRAME, STAND OTHER FRAME OK BUT NEEDS SEAL.
- OPEN DUE TO BROKEN LATCH CAUSING 2" AIR GAP.

BUILDING IS VELY DRAFTY

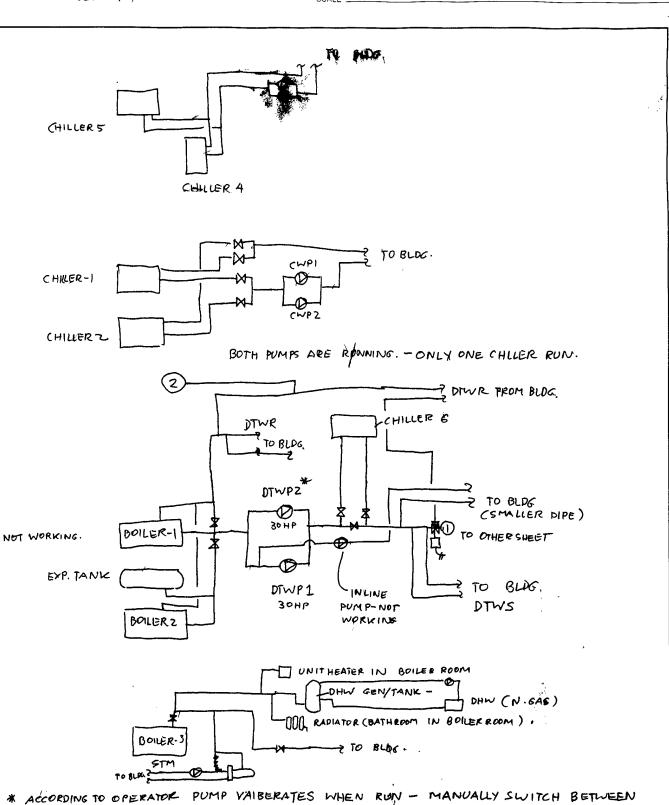
TEMPERATURES

1st Floor, MAIN ENTRANCE > F 70°F 1st Floor, NORTH > 69°F 1st SOUTH > 72.5°F OA TEMP-RAINY AT 1:00pm > 56°F at 6270RH

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BLDG 101

THE 2 PUMPS.

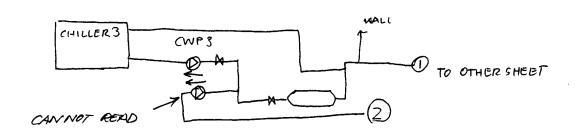


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Denver • Colorado Springs • Atlanta • West Germany

BUS 101

JOB	
SHEET NO.	
CALCULATED BY KC	DATE
CHECKED BY	DATE
SCALE	

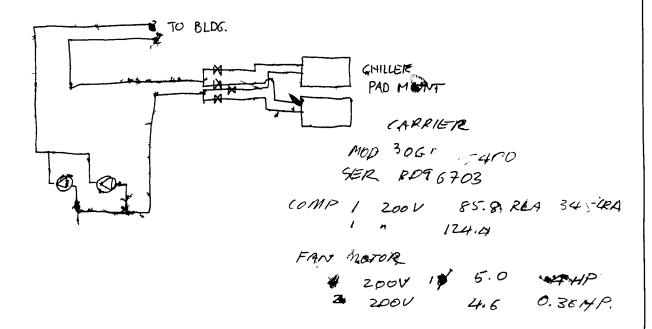


CWP-3 GE 1750 RPM 9
206V 3 HP 30 HO. 6A
CANNOT READ MOD # "OLD"

Denver • Colorado Springs • Atlanta • West Germany

Ft. Gillen BLBG. 101

JOB	
SHEET NO.	OF
CALCULATED BY	DATE
CHECKED BY	DATE
SCALE	



MOD 306B045400 SER P096709

Denver · Colorado Springs · Atlanta · West Germany
Fl. Gillern
Building 101

JOB			
SHEET NO.		OF	
CALCULATED BY	KC	DATE	2_
CHECKED BY		DATE	
SCALE			

Accu 10 Accu 11 Accu 12

ACCU-19 TRANE

AMERICAN STANDARD INC.

MOD. # TTAO9DA300AA

SER # E23197815

COMP. 28.7A 208V 36

CONO. FAN

3.8A 20\$V 1\$ 230

ROOF TOP BLOG 181 ACCULT TRAME

AMERICAN STANDARD INC.

MODH TTAIZOB 3 DOAB

SERH EZ419 7 948

COMP. 2-19. 2A 208/230V 3\$

FOND. FAN

1-7.7A 208/230V 10

ACCU-10 TRANE

MOD# TTA 180B 300AA

SER# = 19198827

COMP. 2-24.1A ZOS/230V 36

COND FAN

2-3.8A 208/230V 16

Denver • Colorado Springs • Atlanta • West Germany

JOB	
SHEET NO.	OF
CALCULATED BYCAL	DATE
CHECKED BY	DATE
2045	

101

RUNS Z4HRS FOR COMP, ROOM

CHU PUMP-1

MOTOR, MARATHON,

MOREL UVI 182TDR 7026 DFL

FRAME 182 +

3 \$\rightarrow

Z08V 9,4 A

1760 RPM

3 HP

\$1.5 EFF

77.7 PF

CHW PUMP-2 SAME, OFF (BACKUP)

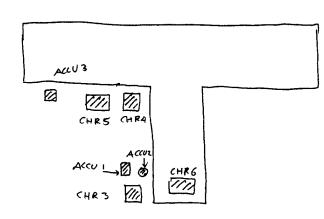
PUMP TALO MODEL 1508

72 GPM 55 FT HD

Denver • Colorado Springs • Atlanta • West Germany

BLDG 101

JOB	
SHEET NO.	OF
CALCULATED BY KC	DATE 1/3/92
CHECKED BY	DATE
SCALE	



CHRI CHRZ

ACCU-I CARRIER

MOD 38AE-014-500

SER ZF81585

COMP. I 208V 3d 49.3A

IOND.FAN 11 208/230V 10 3.7A

| 208/230V 10 4.3A

ACU-Z CARRIER

MOD 38T8048510

SER. 2389E10366

COMP 208/230V 30 #17.6A

FAN 208/230V 10 1.6A

CHILLER 6 CARRIER

MOD 300B175600

SER +296253

COMP 4 460V 30 52.1A

4 460V 30 52.1A

COND FAN 6 460V 30 34 1.75MP

(HILLER4 - SAYDER GENERAL

MOD. ALROJOC

SER 5UBOI76600

COMP I ZOHP 63 RLA 208V 3 Ø

I 25 HIP 77 RLA 208V 3 Ø

COND FAN

4 I HP 4 FLA 208V 3 Ø

CHILLERS CARRIER

MOD 306B070530

SER. T698036

COMP. 2 208V 30 119 RLA

1 280V 30 76 RLA

COND. RAN
6 208V 30 6.6 A 1.75 HP

ACCU-3 BOHN A/C &R DIVISION

MOD DVSOIOZB

SER BJK8122

208V 30 2 FAN@ 1/2 HP. 2-4A

2017) 446-3710

CHILLER -3 TRANE

MOD CGAA-4006-FA-LA

SER L6H171712

TYPE NO. 561-0061

COMP. 1 200-208V 3\$ 144 A

COND 3 200-208V 3\$ 6A 1 HP

VAR SPD FAN MTR 1 1\$ 677 A 149.

Denver • Colorado Springs • Atlanta • West Germany

JOB	
SHEET NO.	OF
CALCULATED BY	DATE
CHECKED BY	DATE
SCALE	

CARRIER

SERVE FIRST FLOOR

MOD. 40RR-012-550 SER. T981150

230N 30 6.3A.

CARRIER (SMALL)

SER 4489 HOS305 200 V I O O.5 HP 1.8A. COOLING ONLY (DX) 2

Denver • Colorado Springs • Atlanta • West Germany

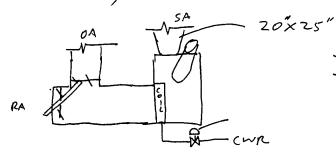
JOB	
SHEET NO.	OF
CALCULATED BY	DATE
CHECKED BY	. DATE
SCALE	

DATA AIRE INC.

AHU IST FLOOR NEXT TO DATA AIRE

MCQUAY SER 3UBOULDZ-06

HAS OA/RA DAMPER FIXED POSITION ALL WE HAVE TO DO IS OA DAMPER IN CLOSED POSITION ACCESSABLE
ADD CONTROL, MOTOR NOT ACCESSABLE



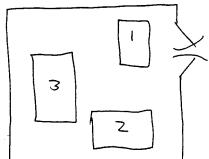
- PNEUMATIC CONTROL
- WITH TIME CLOCK WORKING.
- MODULATE VAWE FROM RETURN AIR.

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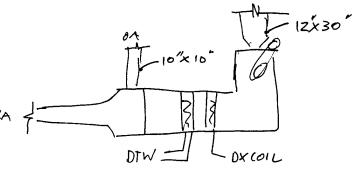
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CALCULATED BY	DATE
CHECKED BY	DATE
SCALE	

FORTH FLOOR

AHUI



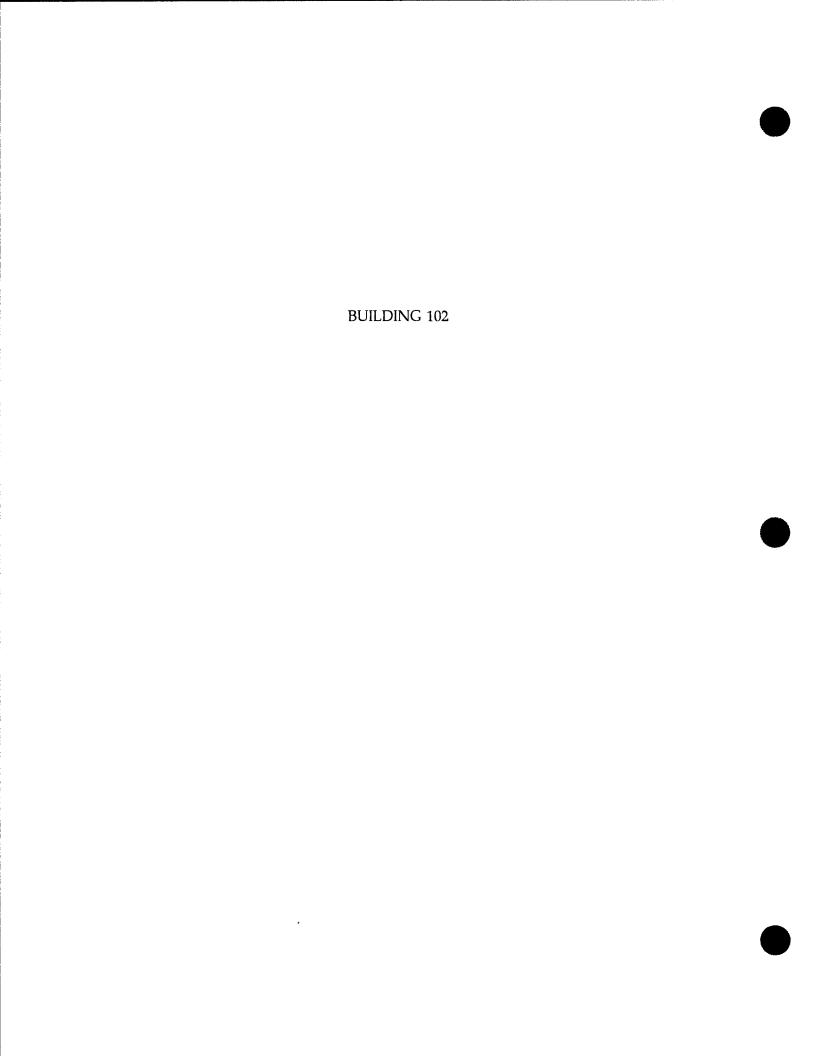
MOR. PVL 145TT DR 7026DC SETR FRAME 145T 20XV 6A 36 1735RPM 82.5 % eff 24P.



MARATHON

HAS OA DAMPER ACTUATOR CELEC.)

44U Z



EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY	JOB PROJ.#	Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000		
BLDG.# /0 2 ECO 4	SHEET NO. CALCULATED BY:	OF		
	CHECKED BY:	1/7/92		
DOMESTIC HO	OT WATER			
FAUCET LOCATION		WATER TEMPERATURE		
MEN'S ROOM SOUTH	SIDE	128°F		
AIRTEMP AT 1:30pm >	740F			
AIR TEMP IN SHOP AREA				
AIR TEMP IN WOOD SHOT				
WOODSHOP SINK		138°F		
PROBLEMS:				
COMMENTS: HW PIPES MUST	DE VERV	PNISTV		
	VE VIPI	10		
· · · · · · · · · · · · · · · · · · ·				

DENVER * ATLANTA * GERMANY				PROJECT NO. SHEET NO. CALCULATED BY: CHECKED BY:	OF		
BLDG.# ECO 5	_10 2	М	OTORS	DATE:	1/7/	/9Z	
MOTOR #	CONDENSATE PUMPS 1 & Z	HP	3/4		3	RPM /	1750
MODEL#			VOLTS	208/40	6 AMPS	5.6/2	<u>z.</u> 8
SERIAL #			PRESEN	THR.		то	
MFG	LOUIS ALLIS		REQUIRE	ED HR.		то	
FRAME	_225YZ		EFF.				
DESCRIPTION	DN	(COMMENT	s LOCAT	ED IN	WOOD	SHOP
TY PE:	05 CLASS:N	M	OTOR M	10,:41	728A		
MOTOR #	EXHAUST FAN	HP_	1/2	PH		RPM	1725
MODEL #	5K454C		VOLTS	115	AMPS	8.2	
SERIAL#			PRESEN	T HR.		то	
MFG	DAYTON		REQUIR	ED HR.		то	
FRAME			EFF.				
DESCRIPTION	ON		COMMENT	s LOCA?	TED IN	Woot	SHOP
				PH		RPM	
MODEL #							
SERIAL #			PRESEN			TO	
MFG			REQUIR	ED HR.		то	
FRAME							
DESCRIPTION	ON		COMMEN [*]	TS			

JOB

Ft. McPherson/Ft. Gillem Energy Study

EMC ENGINEERS, INC.

EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY				Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000 OF		
LDG.# CO 5	10Z Ft-Gillem	– Motor	CHECKED BY: DATE:	_/->	- 92_	
MOTOR #		HP /	PH	3	RPM	1800
MODEL#	6410 453	VOLTS	3 2081	_ AMPS _	3	_
SERIAL#_		PRES	ENT HR.		то	
MFG	BALDOR	REQL	JIRED HR.		то	
FRAME _	182 AHU 1 & AHU	EFF.				
DESCRIPTION						
MOTOR #				AMPS	RPM	
MODEL#				AIVIF3_		
SERIAL#		PRE:	SENT HR.		ТО	
MFG		REQ	UIRED HR.		ТО	
FRAME		EFF				
DESCRIPTION	N .	COMN	ENTS			
MOTOR #		HP	PH		RPM	
MODEL#		VOL	TS	AMPS		
SERIAL #		PRE	ESENT HR.		то	
MFG		RE	QUIRED HR.		то	4. 4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.
FRAME		EFF				
DESCRIPTION	DN .	COM	MENTS			

EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY				JOB PROJECT NO. SHEET NO.	EMC # 3105.000 OF			
BLDG.#	Fl.dillem 102			CALCULATED BY: CHECKED BY: DATE:		7-97	2_	
ECO 5		1	MOTORS					
MOTOR #	l	HP_	3/4	_ PH	/	RPM	1725	
MODEL#	GN6Z AA		VOLTS	115	AMPS	12		
SERIAL #			PRESEN	T HR.		то		
MFG	DAYTON		REQUIRE	ED HR.		то		
FRAME	56		EFF.		_			
	ON EXHAUST FAN # 1 SHOP AREA.		COMMENT	s INOT A	RONNIN	f		
MOTOR #	2	HP_	1/4	РН	/	RPM	1725	
MODEL #			VOLTS	115	AMPS	4.5		
SERIAL #			PRESEN	T HR.		то		
MFG			REQUIRE	D HR.		то		
FRAME			EFF.					
DESCRIPTION	ON UNIT HEATER # 1		COMMENT	s RUNI	NING.			
	STM							
MOTOR #	3	HP	1/2	PH	/	RPM	1725	
MODEL#			•	230				
SERIAL#	1178920-B		PRESEN	T HR.		то	445-45-1	
	WESTING HOUSE		REQUIRE	ED HR.		то		
FRAME	D56		EFF.					
DESCRIPTION	ON CINIT HEATER #	2	COMMENT	s NOT	RUNNII	V6.		

DENVER * ATLANTA * GERMANY EMC # 3105.000 PROJECT NO. SHEET NO. K CALCULATED BY: FL Gillem CHECKED BY: 1-7-92 BLDG.# 102 DATE: ECO₅ **MOTORS** PH MOTOR # VOLTS //5V AMPS MODEL# TO SERIAL# PRESENT HR. TO MFG REQUIRED HR. EFF. FRAME DESCRIPTION UNIT HEATER 3\$4 COMMENTS NO NAME PLATE T'STAT CONTROL STEAM COIL. 5 HP 1/4 PH MOTOR # VOLTS // 5 AMPS MODEL# TO PRESENT HR. SERIAL # TRONE TO REQUIRED HR. MFG FRAME EFF. DESCRIPTION UNIT HEATER 5 86,7 COMMENTS T'STAT CONTROL ______HP //2 1725 RPM PH MOTOR # 6 VOLTS //5 AMPS 8.7 MODEL# 5K454C TO SERIAL # PRESENT HR. DAYTON TO MFG REQUIRED HR. FRAME DESCRIPTION EXH. FAW 34 5,6 COMMENTS NOT RUNNING ONLY SOMMER

JOB

Ft. McPherson/Ft. Gillem Energy Study

EMC ENGINEERS, INC.

Ft. McPherson/Ft. Gillem Energy Study EMC ENGINEERS, INC. JOB EMC # 3105.000 **DENVER * ATLANTA * GERMANY** PROJ.# SHEET NO. KC CALCULATED BY: CHECKED BY: 102 1-7-92 DATE: BLDG.# Fl. aillem ECO 10 **AIR STRATIFICATION** WELDING SHOP REQ. TEMP. LOCATION SOURCE TEMP. AT TSTAT OPP. HOURS 7.00 TO 4.00TEMP. AT CEILING 74, 2 F TEMP. AT FLOOR 73' C SKETCH ROOM - DIMENSIONS, T-STATS, DUCTS, FANS, ETC. 24 HIGH. 74.2 F ROLLUP DOOR 73 F COMMENTS:

Ft. McPherson/Ft. Gillem Energy Study EMC ENGINEERS, INC. JOB EMC # 3105.000 **DENVER * ATLANTA * GERMANY** PROJ.# SHEET NO. KC CALCULATED BY: CHECKED BY: 102 1-7-92 BLDG.# DATE: ECO 10 **AIR STRATIFICATION** WOODSHOP REQ. TEMP. LOCATION SOURCE UNIT HEATER TEMP. AT TSTAT TO 4:00 7:30 TEMP. AT CEILING 76 OPP. HOURS TEMP. AT FLOOR 73.5 SKETCH ROOM - DIMENSIONS, T-STATS, DUCTS, FANS, ETC. WOOD TRUST 24' 73.5 F WOOD SHOP Z UH. COMMENTS:

	JOB	
E M C ENGINEERS, INC.	SHEET NO.	
Denver • Colorado Springs • Atlanta • West Germany	CALCULATED BY	
^	CHECKED BY	DATE
BLDG 102	SCALE	

AC UNIT# 1 (WEST)

CARRIER MOD# 38AE012500

5#R295693

COMPRESSOR (1) 208V 3\$ 60\$ 43.6 RLA

170 LRA

R-ZZ

FANS(Z) 208V 4FLA

AC UNIT# Z (SOUTH)

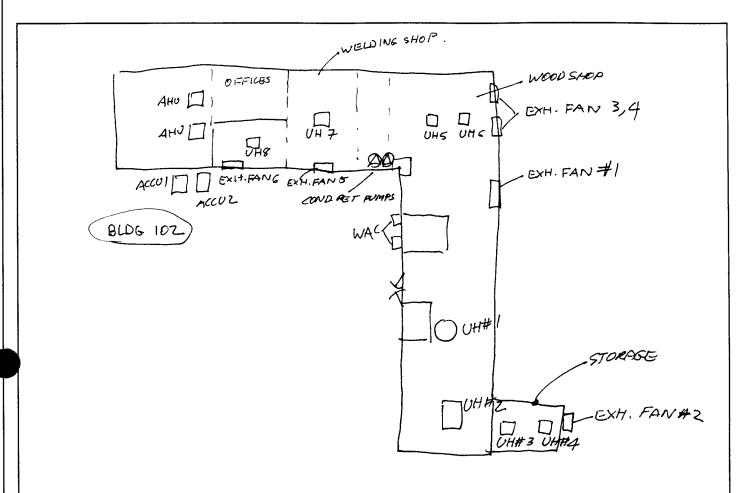
EAST)

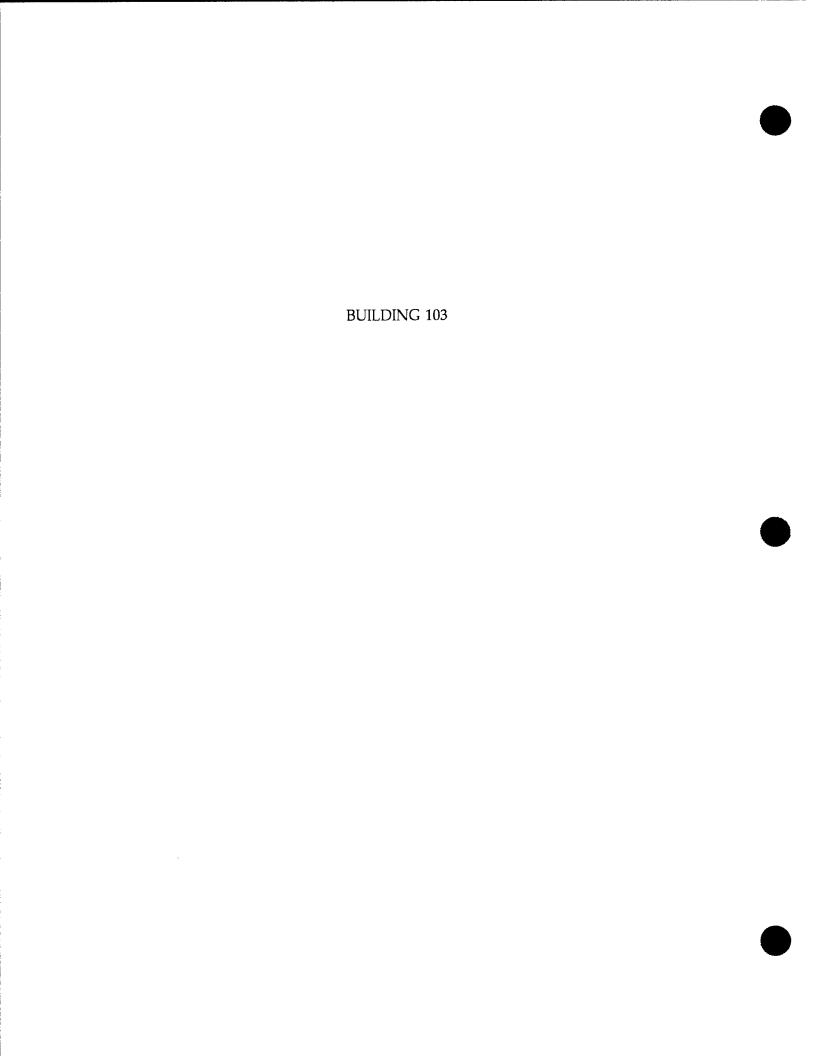
CARRIER MOD# 38AE012500

5#R29569Z

Denver • Colorado Springs • Atlanta • West Germany

JOB	
SHEET NO.	OF
CALCULATED BY	DATE 1-792
CHECKED BY	DATE
SCALE	





MC ENGINEERS, INC.	JOB	Ft. McPherson/Ft. Gillem Energy Stud EMC # 3105.000		
ENVER * ATLANTA * GERMANY	PROJ.#			
	SHEET NO.	WC_		
	CALCULATED BY: CHECKED BY:			
LDG.#/03	DATE:	1/2/92		
CO 4	<i>5</i> /112.			
DOMESTIC HO	T WATER			
FAUCET LOCATION		WATER TEMPERATURE		
AHU ROOM (WASH SINK) BATHROOM.		133.4		
PATILOOM		133.9		
DAI HILLONI.				
PROBLEMS:				
I HOULEMO.				
		·		
COMMENTS:				
COMMITTIO.				
•				

DENVER * ATLANTA * GERMANY		JOB PROJECT NO.	Ft. McPherson/Ft. Gillem Enargy Study EMC # 3105.000			
Citizii /IID Citi/ Octimatii		SHEET NO.	OF			
LDG.# 103	MOTOR	CALCULATED BY: CHECKED BY: DATE:		•		
MOTOR # 19	HP 3	PH	3	RPM	1750	
MODEL# 6-342912-13	VOLTS	200	_ AMPS _	9,6		
SERIAL #	PRESE	NT HR.		то	2400	
MFG CENTURY	REQUI	RED HR.		то	2400	
FRAME S/82T	EFF.					
DESCRIPTION AI-HU	COMMEN	NTS				
MOTOR #	HP	PH		RPM		
MODEL#			AMPS _			
SERIAL #	PRESE	ENT HR.	0	то	2400 2400	
MFG	REQU	IRED HR.	_0_	то	2400	
FRAME	EFF.					
DESCRIPTION ROOF TOP-1	СОММЕ	NTS_NO	ALLES	5		
	C 0 . 1 1	50 1.D	Pan	1		
SEDIEL TO				,		
SERVES TEL						
MOTOR #	HP	PH		RPM		
MOTOR #	HPVOLTS	PH	AMPS	RPM	•	
MOTOR # MODEL # SERIAL #	HPVOLTS	PH S ENT HR.	AMPS	RPM TO	•	
MOTOR #	HP VOLTS PRES	PH	AMPS	RPM TO	2400 2400	

EMC	EN	GIN	IEEF	RS,	INC.
DEMÆ	R * /	ATI A	NTA 1	· GEF	NANY

JOB Ft. McPherson/Ft. Gillem Energy Study
PROJ.# EMC # 3105.000

SHEET NO. OF

CALCULATED BY: J W

BLDG.# 103 EC0 15 F/RE

برن / ر

SHEET NO.		OF	
CALCULATED BY:	JW		
CHECKED BY:			
DATE:	1/2/91		

ROOM #	# OF FIXTURES	1	1 -1	BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
	2	4	34	FLOUR	8~	YES	YE S	(YES
2	4	2	34	F	OFF	YE S	NO	2	No
3	2	2	34	F	δN	YE S	NO	1	YE5
4	1	2	34	F	OFF	YES	NO	(No
54	1	/	150	PI	OFF	YE S	# YES	1	NO
5B	1	1	150	I	71	11	No	1	No
4	マ	4	34	F	OFF	YE S	YES	/	NO
7	/	/	150	I	ON	YES	NO	/	YES
8	5	ನ	8 Foot	F	ON	YES	NO	4	YES
9	9 5	2	34	F	OFF	YES	NO	2	NO
10	1	/	100	I	ON	YES	NO	/	NO
10	l	2	34	F	ON	11	NO	1	NO
12	2	2	40	F	OFF	YES	NO	1	ND
13	1	/	70	F	OFF	YES	NO	1	YE S
14	1	2	8'	F	ON	YES	YES	1	YES
-									

# OF EXIT SIGNS -	
COMMENTS:	

DENVER * ATLANTA * GERMANY

DENVER * ATLANTA * GERMANY

PROJ. *

SHEET NO.

CALCULATED BY:

DATE:

LIGHTING

DOE

THE WITCHING

Ft. McPherson/Ft. Gillem Energy Study

EMC # 3105.000

OF

CALCULATED BY:

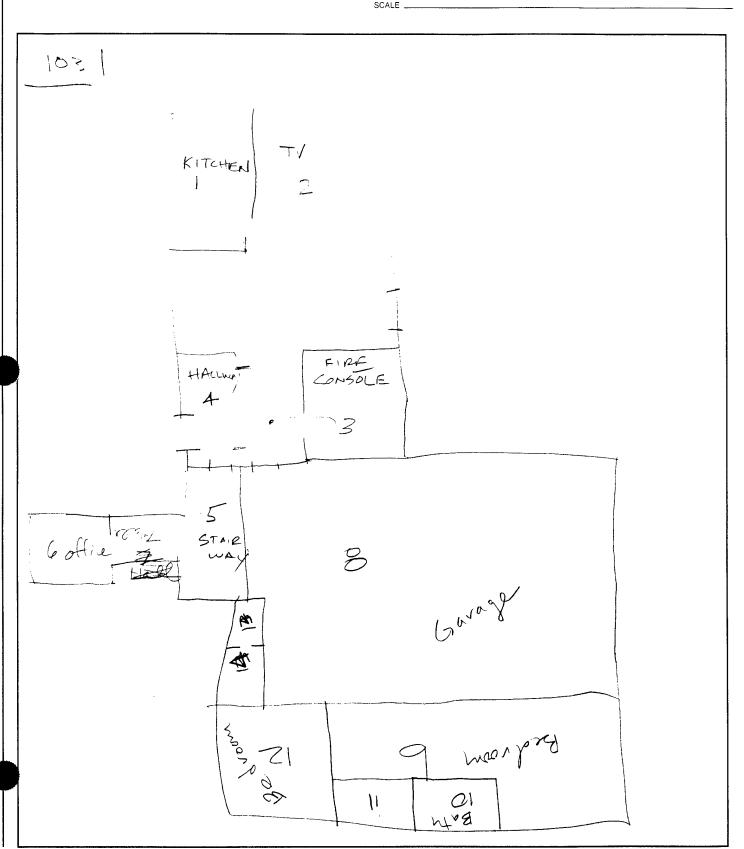
1 2 9 7

THE LIGHTING

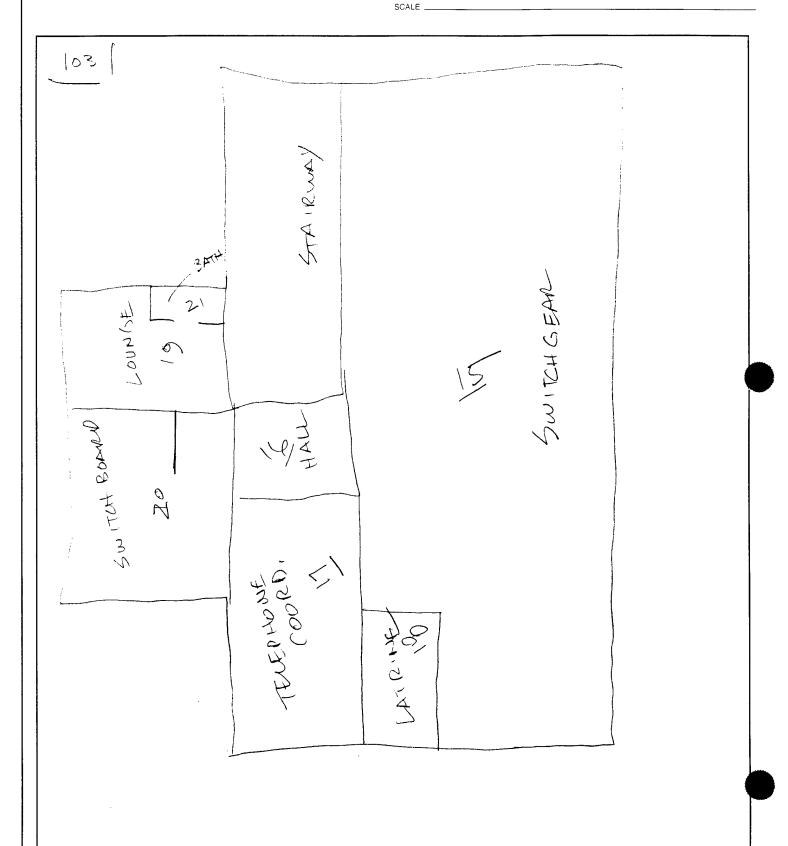
ROOM #	# OF FIXTURES	1		BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
15	20	2		F	ON	YES	NO	3	YES
15	4	2	40000	F	ON	YES	NO	2	YES.
16		ス	32	F	ON	YE S	NO	1	YES
17	3	4	34	F	ON	YE S	YES	/	YES
18	1	/	75	I	ON	11	NO	1	YES
19	2	4	34	F	ON	YES	YES	/	YE S
20	4	2-2	34	F	ON	YES	NO	1	NO
21	1	/	ļ	Z	OOFF	YES	NO	/	YE5
			i						

# OF EXIT SIGNS -			
COMMENTS:			

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BUILDING 133

JOB	Ft. McPherson/Ft. Gillem Energy Study
	EMC # 3105.000 of
	IW
	, ,
DATE:	1/2/92
ATER	
	WATER TEMPERATURE
	155° F- (100Hor)
	1520F
	·
<u> </u>	
5 70 1	NE BATHROOM
<i>)</i>	
	SHEET NO. CALCULATED BY: CHECKED BY: DATE:

LDG.#	ANTA * GERMANY		; (PHOJECT NO. SHEET NO. CALCULATED BY: CHECKED BY: DATE:	EMC # 3105.	OF	
CO 5		N	MOTORS				
MOTOR#		HP_	3	PH	3_	RPM	1735
MODEL#	SBDP		VOLTS	200	_ AMPS	11.4	-
SERIAL#	7110N		PRESENT	HR.		то	2400
MFG _	WESTINGHOUSE		REQUIRE	O HR.	************	то	
FRAME	182T		EFF.		_		
JESONIF HOLY	NAHU FAN (UPSTA						
	2		3	PH	3	RPM	1735
MOTOR #		HP		-	-		
-	SBDP	HP	VOLTS	200	AMPS _	11.4	
MODEL#		HP		200	AMPS _		2400
MODEL #	SBDP	HP	VOLTS	2 00 		11.4	
MOTOR # MODEL # SERIAL # MFG FRAME	SBDP 7 110 1 WESTINGHOUSE 182T		VOLTS PRESENT REQUIRE EFF.	2 00 T HR. ED HR.		11.4 то то	
MODEL # SERIAL # MFG FRAME	SBDP 7 110 1 WESTINGHOUSE 182T		VOLTS PRESENT REQUIRE EFF.	2 00 T HR. ED HR.		11.4 то то	
MODEL # SERIAL # MFG FRAME	SBDP 7110 1 WESTINGHOUSE		VOLTS PRESENT REQUIRE EFF.	2 00 T HR. ED HR.		11.4 то то	
MODEL # SERIAL # MFG FRAME DESCRIPTION	SBDP 7 110 1 WESTINGHOUSE 182T	AIR)#	VOLTS PRESENT REQUIRE EFF.	200 THR. EDHR. S SECOM		11.4 то то	
MODEL # SERIAL # MFG FRAME DESCRIPTION	SBDP 7110 1 WESTINGHOUSE 182T N AHU FAN (UPS)	AIR)#	VOLTS PRESENT REQUIRE EFF. COMMENTS	200 THR. EDHR. S SECOM	0 10 FLC	TO TO	2400
MODEL # SERIAL # MFG FRAME DESCRIPTION	SBDP 7110 1 WESTINGHOUSE 182T N AHU FAN (UPS)	AIR)#	VOLTS PRESENT REQUIRE EFF. COMMENTS	200 THR. EDHR. S SECON PH 230	0 10 FLC	TO TO	2400
MODEL # SERIAL # MFG FRAME DESCRIPTION MOTOR # MODEL #	SBDP 7110 1 WESTINGHOUSE 182T N AHU FAN (UPS)	AIR)#	VOLTS PRESENT REQUIRE EFF. COMMENTS VOLTS	200 THR. EDHR. S SECOR PH 230 ITHR.	0 10 FLC	TO TO PORE RPM &	2400

JOB

EMC ENGINEERS, INC.

Ft. McPherson/Ft. Gillem Energy Study

EMC ENG	SINEERS, INC.			JOB	Ft. McPhers	on/Ft. Gillem	Energy Study
DENVER * AT	LANTA * GERMANY		PROJECT NO.	EMC # 3105.000			
				SHEET NO.		OF	
				CALCULATED BY: CHECKED BY:			
BLDG.#				DATE:		•	
ECO 5		N	MOTORS				
MOTOR #	4	HP_	?	PH		RPM	
MODEL #	G-41201-20 M		VOLTS	1/5	_ AMPS _	7	
SERIAL#			PRESENT	ΓHR.		то	
MFG	CARRIER, COMFORTMA	IKE	REQUIRE	D HR.		то	
FRAME		،، ۵	EFF.		_		
DESCRIPTIO	ON AHU BOTTOM FLOOR	* 4 		S NOT A	cc.		
MOTOR #	5	HP _	1/8	PH		RPM	
MODEL#	UHBA- 0810B		VOLTS	45-24	AMPS	20.	8
SERIAL#			PRESEN	T HR.		ТО	
MFG	RUUD		REQUIRE	ED HR.		ТО	
FRAME			EFF.				
DESCRIPTION	ON AHU #5		COMMENT	s HOME	TYPE	UNIT	
MOTOR #		HP		PH		RPM	
MODEL #			VOLTS		AMPS		
SERIAL #			PRESEN	VT HR.		то	
MFG			REQUIR	ED HR.		то	
FRAME			EFF.				
DESCRIPTI	ON		COMMEN	TS			

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JOB	
SHEET NO.	OF
CALCULATED BY	DATE
CHECKED BY	DATE
COME	

133

= ACCU-1 SERVES ____

RUUD AIR CONDITIONER

MODEL VACC - OSGCAS

SER NO. 4147 M2890 9117

2081 3 \$ 6013

20,5 A

· ACCU-ZEB NO NAMFRATE, SERVES WALKIN

COACO A

CARRIER

MODEL 38AE 016 500

SER 2390F18891

COMP 1, 2084, 374 16

FAN 1, 2084, 374 16

A-111 - 8, &A ((0-8)

** ACC U-7

MALKIN ? PEFRIC ? PREEZER

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JOB	
SHEET NO.	OF
CALCULATED BY	DATE
CHECKED BY	DATE

132

ACCU-6 REFORES

CLIMATE TONTROL

MODEL A. R 801060-25

SER 0135810-122-0084

COMP 130V, ITEA, 36

FAN 230V, 2,5A, 14

AHU- 8 \(\) ACCU-8 (RUNNIN')

TRANE, FORCED AIR FURNACE W/ ACCU

MODEL BYC 024H ILOAA

TYPE 168-740-1-A

60,000 BN IN N.GAS

I COMP- 11.8A, ZOBV, ID

1 OND - 1.7A, ZOBV, ID, VAHP

I EVAP FAN - ZISA, ZOBV, ID, VAHP

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JOB	
SHEET NO.	OF
CALCULATED BY	_ DATE _ 1 /2 /9.7
CHECKED BY	DATE
SCALE	

133

GAS FIRED WATER LEATERS

MODEL BY 65 GROA, SO GAL N,GAS FREE 50,000 BY ME INPLT 45,5 GAL, YE

-2, AO SMILL

MODEL ET 270 830, 100 GAL

N. SAS FIRM

270, 000 BT/MC NIFT

224. GAL I-R

. [E M	С	ENGIN	IEERS	,	INC.
Denver •	Color	ado	Springs •	Atlanta	•	West Germany

BUG 133

JOB			
SHEET NO			OF
CALCULATED BY	JW		DATE 1/2/92
CHECKED BY			DATE

TEMPERATURES

NORTH EAST WING HALL => 62°F DINING HALL => 69°F at 2:00pm BUILDING 207

EMC ENGINEERS, INC.	JOB	Ft. McPherson/Ft. Gillem Energy Study
DENVER * ATLANTA * GERMANY	PROJ.#	EMC # 3105.000
	SHEET NO.	OF
	CALCULATED BY:	JW
$\bigcap A \bigcap$	CHECKED BY:	1/2/02
BLDG.#	DATE:	1/3/92
ECO 4		
DOMESTIC HO	OT WATER	
FAUCET LOCATION		WATER TEMPERATURE
SOUTH (BAY 1) PAINCE	T FAUCET	1420F
SOUTH (BAY 1) FAINCE BAY-3 MEN'S BAY-7 BREAKROOM		142°F 142°F 125°F
BAY-7 BREAKROOM		125°F
		·
PROBLEMS:		
PHOBLEMS.		
COMMENTS:		

EMC ENGINEERS, INC. Ft. McPherson/Ft. Gillem Energy Study JOB EMC # 3105.000 **DENVER * ATLANTA * GERMANY** PROJECT NO. KL CALCULATED BY: CHECKED BY: 207 1/3/92 BLDG.# DATE: ECO 5 **MOTORS** PH **RPM** HP _____ MOTOR # AMPS VOLTS MODEL# TISTAT CONTROL PRESENT HR. SERIAL# SINGER TO REQUIRED HR. MFG EFF. FRAME DESCRIPTION FURNACE SOUTH END. (AHV-1) COMMENTS NOT ACCESSABLE - HOME TYPE MOTOR # 2,3,5,6,7 HP PH **RPM** AMPS VOLTS MODEL# TO PRESENT HR. SERIAL # TO REQUIRED HR. MFG KETT EFF. FRAME DESCRIPTION UNIT HEATER COMMENTS SOUTH END WAREHOUSE HP 5 Z 1740 PH RPM MOTOR # MODEL# TVK184TTDR7627ACL VOLTS 200 14.8 AMPS 2400 0 TO PRESENT HR. SERIAL # 4'30 7.'30 TO REQUIRED HR. MARATHON MFG 1841 EFF. 85.5 FRAME DESCRIPTION AHUZ SERVE OFFICES COMMENTS HW & OX COIL

SOUTH END

SOUTH END

18

EMC ENGINEERS, INC. Ft. McPherson/Ft. Gillem Energy Study JOB **DENVER * ATLANTA * GERMANY** EMC # 3105.000 PROJECT NO. SHEET NO. CALCULATED BY: CHECKED BY: 207 BLDG.# ECO 5 **MOTORS** PH / RPM /725 MOTOR # MODEL# 0 to 2400 PRESENT HR. SERIAL# BELL GOSSETT REQUIRED HR. 7.30 TO MFG EFF. FRAME DESCRIPTION HW DUMP COMMENTS_____ BOILET TO PHU COIL. **RPM** VOLTS AMPS MODEL# TO PRESENT HR. SERIAL # TO REQUIRED HR. MFG EFF. FRAME DESCRIPTION ACCU FOR AHU COMMENTS MOTOR #8 RPM // HP ____ PH ____ MOTOR # AMPS VOLTS MODEL# TO PRESENT HR. SERIAL # DAYTON TO REQUIRED HR. MFG EFF. FRAME DESCRIPTION ELECTRIC HEATER & COMMENTS VERY SMALL

BLOWER

E MC ENGINI DENVER * ATLAN			Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000		
BLDG.# ECO 10	207	SHEET NO. CALCULATED BY: CHECKED BY: DATE:	1/3/92		
	AIR S	TRATIFICATION			
LOCATION	STORAGE	REQ. TEMP.			
TEMP. AT TSTAT		SOURCE			
TEMP. AT CEILI	NG	OPP. HOURS	то		
TEMP. AT FLOO	R 60 F				
OF.	=FICE'S.	JUH GOF			
COMMENTS:	COMPUTER & SU	PAPLIES STORAGE			

Ft. McPherson/Ft. Gillem Energy Study EMC ENGINEERS, INC. JOB **DENVER * ATLANTA * GERMANY** EMC # 3105.000 PROJ.# SHEET NO. KC CALCULATED BY: CHECKED BY: 207 BLDG.# DATE: ECO 10 **AIR STRATIFICATION** NORTHEND REQ. TEMP. LOCATION SOURCE UNIT HEATER TEMP. AT TSTAT TEMP. AT CEILING 68 F OPP. HOURS TO T'STAT 65.4 F TEMP. AT FLOOR GAS FIRE SKETCH ROOM - DIMENSIONS, T-STATS, DUCTS, FANS, ETC. TUI+ 68'F@25' 654'F BAY 7 COMMENTS:

Ft. McPherson/Ft. Gillem Energy Study EMC ENGINEERS, INC. JOB EMC # 3105.000 **DENVER * ATLANTA * GERMANY** PROJ.# SHEET NO. KC CALCULATED BY: CHECKED BY: 207 BLDG.# DATE: ECO 10 **AIR STRATIFICATION** 207 SOUTHEND REQ. TEMP. LOCATION SOURCE TEMP. AT TSTAT OPP. HOURS 7:30 TO 4:30 TEMP. AT CEILING TEMP. AT FLOOR SKETCH ROOM - DIMENSIONS, T-STATS, DUCTS, FANS, ETC. LEXH. FAN. 60-62°E FOOD STORAGE COMMENTS:

EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY

BLDG.# 207 EC0 15

ьов Ft. McPherson/Ft. Gillem Energy Study							
PROJ.#	EMC # 3105.000						
SHEET NO.	OF						
CALCULATED BY	JW						
CHECKED BY:							
DATE:	1/6/92						

ROOM #	# OF FIXTURES			BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
BAY	45	2	8'	F	ON	X	NO		У
BAY	45	2	8'	F	ON	Y	NO NO		У
130	15	1	60	I	OFF	У	N		N
131	P								
							2		

# OF EXIT SIGNS -	
COMMENTS:	

EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY

BLDG.# 207 EC0 15

JOB	t. McPherson/Ft. Gillem Energy Study				
PROJ.#	EMC # 3105.000				
SHEET NO.	OF				
CALCULATED BY:	JW				
CHECKED BY:					
DATE:	1/3/9/				

DOOM #	# OF	L 414DQ/	lava TTC/	DIU O TVDE	ON/OFF	SWITCH	GOOD FOR	NO. OF	UNOCC LIGHTS
ROOM #	# OF FIXTURES			BULB TYPE	DURING SURVEY	YES/NO	OCC. SENSOR		ON
54	5 4ME	45	53						
55	2	4	34	F	OFF	Y	У	1	NO
56	88	2	34	F	0 N	Y	NO	8	NO
57	6	4	34	F	ON	Y	K Y		Y
58	6	4	34	F	ON	У	У	1	Y
59	3	4	34	F	OFF	\vee	У	/	No
60	90	2	34	F	ON	Y	N	840	\mathcal{N}
101	3	2	34	F	OFF	Y	Y	-	NO
62	3	4	34	F	ON	Y	Ø N	/	Y
63	3	2	34	F	ON	У	N	1	No
64	1	7	100	丰	ON	Y	\sim	1	ND
65	2	2	8	F	OFF	Y	\mathcal{N}	1	N6
66	1	2	8'	F	ON	Y	N		YES
67	1	1	60	I	ON	У	У	/	XES
						, , , , , , , , , , , , , , , , , , , ,		,	

# OF EXIT SIGNS -			
COMMENTS:			

DENVER * /	ATLANTA *	GERMANY	

	γ_{Λ}
BLDG.#	207
EC0 15	-

JOB	Ft. McPherson/Ft. Gillem Energy Study					
PROJ.#	EMC # 3105.000					
SHEET NO.	OF					
CALCULATED BY	: J W					
CHECKED BY:						
DATE:	1/3/92					

RO	OOM #	# OF FIXTURES	-		BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
	36	4	4	34	F	ON	У	У	l	Y
	37	loche		,						
	38	35	2	8'	F	01	Y	NO	Breakers	Y
	39	6	4	34	F	ON	4	NO	1	NO
4	40	6	4	34	F	ON	У	NO	/	NO
4	41	66	2	8'	F	ON	Y	NO	D	Y
)	42	40	7	8'	F	ON	Y	NO	?	У
	43	1	2	34	F	ON	У		/	У
	44	6	4	34	F	OFF	Y	X	(NO
	75	221	2	34	F	0N	<u> </u>	NO	1	NO
4	10	4	4	34	F	OFF	У	У	1	NO
2	17	3	4	34	F	OFF	Y	Y	/	NO
4	48	2	4	34	F	OFF	Y	У	/	NO
4	49	Q	4	34	<i>f</i> -	ON	У	Y	/	YES
3	0	4	4	34	F	ON	У	У	1	У
3	51	4	4	34	r	ON	У	Y	/	NO
į	7人_	\mathcal{A}	4	34	F	ON	Y	Y	/	Y
	53	6	4	34	F	ON	Y	\sim		<i>Y</i>

# UF EXIT SIGNS -			
COMMENTS: (1) 4 com	lifts	are emergences	

EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY

BLDG.# 207 EC0 15

JO8	Ft. McPherson/Ft. Gillem Energy Study					
PROJ.#	EMC # 3105.000					
SHEET NO.	OF OF					
CALCULATED BY	JW					
CHECKED BY:						
DATE:	1/3/92					

LIGHTING

					ON/OFF				UNOCC
ROOM #	# OF		1 1	BULB TYPE	DURING	SWITCH	GOOD FOR	NO. OF	LIGHTS
	FIXTURES	FIXTURE	BULB		SURVEY	YES/NO	OCC. SENSOR	SWITCHES	ON
18							<u></u>		
19	2	4	34	F	ON	Y	ONO	B /	NO
20	2	4	34	F	ON	У	Y	1	YES
21	6	2-4	7	F	ON	Y	<u> </u>	/	NO
22	6	2-U		F	ON	У	Y	1	У
23	4	P							
24	1	4	34	F	ON	Y	M	1	\mathcal{N}
25	8	4	34	F	ON	Y	У	2	Y
26	3	4	234	F	ON	Y	ND	1	Nd
27	62	1-11	34	F	ON	Y	NO	2	No
28	6	2-U	•	F	ON	У	У	1	PNO
29	14	4	34	F	ON	Y	NO	3 2	NO
30	3	2-4	34	F	on	У	У	/	NO
31	3	4- 2-U	34	F	OFF	χ	Y	1	NO
32	2/2	2-4	34	· F	UN	У	NO	/	# Y
33	6	4	34	F	ON	Y	NO	1	NO
34	2	2 4	34	F	ON	У	У	1	X
35	2	2	8	F	OFF	Υ	Y	1	ND

#	OF	EXIT	SIGNS	-
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COMMENTS:

ll

dl

EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY

BLDG.# EC0 15	4 207

JOB	Ft. McPherson/Ft. Gillem Energy Study				
PROJ.#	EMC # 3105.000				
SHEET NO.	OF				
CALCULATED BY:	JW				
CHECKED BY:					
DATE:	1/3/92				

ROOM #	# OF FIXTURES	· -	1 1	BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF	UNOCC LIGHTS ON
	10	4	34	F	ON	Y	NO	2	NO
2	2	4	34	F	ON	У	YES	/	YE5
\$ 3	/	Z	8'	۴	OFF	Y		1	NO
4	SAME	17					,	/	
5	15	Z	8'	F	ON	/	NO	BREAKERS	NO
6	4	4	34	F	MON	Y	y	/	Y.E.S
7	43	2	8'	F	ON	Y	NO	BREAKER	XES
8	2	2	8'	F	ON	Y	NO	(NO
9	0 3	04	34	F	ON	У	NO	1	NO
10		1	34	F	0 N	X	NO	/	X
//	4	2	34	F	OFF	Y	YES	/	NO
12	5	4	34	F	0~	У	У	1	NO
13	6	4	34	F	ON	У	У	/	NO
14A	2	4	34	۴	0~	У	\mathcal{N}		NO
14B	4	4	34	F	ON	Y	N	1	NO
15	6	4	34	F	ON	Y	N		NO
16	7	4	34	F	* N	У	\mathcal{N}	1	NO
17	4	2-U	7.	F	OFF	У	У	1	NO

# OF EXIT SIGNS -			
COMMENTS:			

Ε	М	C	EN	IGIN	EE	RS,	INC	· •

Denver • Colorado Springs • Atlanta • West Germany

JOB	
SHEET NO.	OF
CALCULATED BY	DATE
CHECKED BY	DATE

207		
	minous It 4' H	
UH I	HEAVY GATEN TINT	
	GLASS+ F6(GR	ea)
		,
	<12'-9	

SCALE _

SINGLE PANE GLASS @ 8'X8'

I'' CNACK UNDER STEEL MAN DERS

L'' II PERMETON GALLE DERS (XIDING) 10'X10'

CEPTENT ROOF (NO INSUL)

WALL DOUBLE BIKICK

STEEL FRAME CONSTRUCTION

TRUCK DOOR LEFT OPEN WITH V/H RUNNING WALLS 300 LAYERS BRICK NO AIR SHACE **BUILDING 213**

EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY BLDG.# 213 ECO 4 DOMESTIC HOT	JOB PROJ.# SHEET NO. CALCULATED BY: CHECKED BY: DATE:	Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000 OF J / 4 / 9 Z
FAUCET LOCATION		WATER TEMPERATURE
MEN'S ROOM BAY-5		122°F
PROBLEMS:		
COMMENTS:		

ENVER * ATI	ANTA * GERMANY		PROJECT NO.	EMC # 3105.000			
		,	SHEET NO.	OF			
			CALCULATED BY:	<u> </u>			
BLDG.#	213		CHECKED BY:		<i>a</i> ?		
:CO 5	21)	······································	DATE:	1-6-	92		
		MOTOF	RS				
MOTOR #	10	HP 7,5	PH	_3	RPM	1750	
MODEL#	6-33077/-0	3 VOLTS	230/460	AMPS	21/10.5	<u>-</u>	
SERIAL #		PRESI	ENT HR.	_0	то	2400	
MFG	GOULD	REQU	IRED HR.		то	***************************************	
FRAME		EFF.					
DESCRIPTIO	NHEATING SUPI	014#2 COMME	NTS WIN	TER C	NLY		
				RUNN			
MOTOR #		HP 3,0	PH	3	RPM	3450	
	7-350378-01						
SERIAL#		PRES	ENT HR.		то		
MFG	CENTURY	REQU	JIRED HR.		то		
FRAME		, EFF.					
DECODIDEIO	N CONDENSATE	DI MAIO COMME	$F/ \wedge I$	17 5	WITCH	<i>(</i>	
DESCRIPTIO	CONDENSA LE	PUMP COMME	N15 /20/	11 9	<i>,</i>		
	. / .					>	
MOTOR #	14	HP3_	PH				
MODEL#	8-350378-01	VOLTS	s 200-230/4	60 AMPS	9.0-8.6	1 4.3	
SERIAL #		PRES	ENT HR.		то		
MFG	CENTURY	REQU	JIRED HR.		то	*Books**	
FRAME		EFF. 井て					

JOB

Ft. McPherson/Ft. Gillem Energy Study

	NEERS, INC. ANTA * GERMANY			JOB PROJECT NO. SHEET NO.	Ft. McPherson/Ft. Gillem Energy Stude EMC # 3105.000			
BLDG.# ECO 5	213	N	MOTORS	CALCULATED BY: CHECKED BY: DATE:	1-6-92			
MOTOR #	/2.	HP_	10	PH	3	RPM	1745	
MODEL# /	NK 215TTDR 7026HT	w	VOLTS	208-230	AMPS	26.6		
SERIAL #			PRESENT	HR.		то	H 2	
MFG _	MARATHON		REQUIRE	O HR.		то	4-42-2 · · · · · · · · · · · · · · · · · ·	
FRAME _	215T		EFF.	86.5	_			
DESCRIPTION	I CWP RETURN Z		COMMENTS	SUMME	e and	<i>Y</i>		
			À	t CAN NO	OT TAKE	E READII	No.	
MOTOR #	//	HP_	10	PH	3	RPM	1725	
MODEL#	MK ZISTTUR FOZGHT	W	VOLTS 4	208-230	AMPS	26.6		
SERIAL#			PRESENT	HR.		то		
MFG	MARATHON		REQUIRE	D HR.		то		
FRAME	2157		EFF.	86.5	_			
DESCRIPTION	WP I		COMMENTS	SUMI	NER C	NLY		
			×	CANNI	TAKO	e REA	DING.	
MOTOR #		HP_		PH		RPM		
			VOLTS		_ AMPS			
SERIAL#			PRESENT	HR.		то		
MFG			REQUIRE	D HR.		то		
FRAME			EFF.		_			
	N .		COMMENTS					

DENVER * ATLANTA * GERMANY EMC # 3105.000 PROJECT NO. SHEET NO. CS CALCULATED BY: CHECKED BY: 213 BLDG.# DATE: 1-6-92 ECO 5 **MOTORS** /\$ HP 3_ PH **RPM** MOTOR # 200-230 AMPS MODEL# BWV180B300BA VOLTS TO PRESENT HR. SERIAL # American Standard REQUIRED HR. TO MFG EFF. FRAME COMMENTS ROOM 128 DESCRIPTION HP_____PH RPM MOTOR # AMPS _____ VOLTS _____ MODEL# TO PRESENT HR. SERIAL # TO REQUIRED HR. MFG FRAME EFF. DESCRIPTION COMMENTS HP PH MOTOR # AMPS _ VOLTS MODEL# TO PRESENT HR. SERIAL # REQUIRED HR. TO MFG FRAME EFF. AHU COMMENTS____ DESCRIPTION

JOB

Ft. McPherson/Ft. Gillem Energy Study

EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY		•		Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000 OF		
BLDG.# 213 ECO 5	MOTORS	CALCULATED BY: CHECKED BY: DATE:	C5			
MOTOR # 4 +	IP <u>Z</u>	PH	3	RPM	1740	
MODEL# 8-337207-1						
SERIAL #	PRESEN	•		то		
MFG Gould	REQUIRE	D HR.		то		
	EFF.					
DESCRIPTION CWP 23	COMMENT	s GNLY	/N :	SUMN	1 ER	
MOTOR # \ 5	IP 15	PH .	3	RPM	1755	
MODEL# 1 F - 17/3 - 02 - 234	VOLTS	200	_ AMPS _	. 49	_	
SERIAL #	PRESEN	T HR.	0	то	2400	
MFG U.S. Electric Motor	REQUIRE	ED HR.	7:30	то	4:30	
FRAME 254 T	EFF.	87,5	_			
DESCRIPTION, ATO SUPPLY	COMMENT	s . Phase				
KVAR 4.5 KVA 5.5 PF 81.4	VOU AN		205			
мотоr #6	HP 3/4	PH		RPM	1725	
MODEL# <u>M-270 A</u>	VOLTS	115	AMPS _	1018	_	
SERIAL #	PRESEN	T HR.		то		
MFG LELAND-FARADAS	REQUIRE	ED HR.		то		
FRAME	EFF.					
DESCRIPTION Return #/	COMMENT	s				

ENVER * ATI LDG.# CO 5	213			PROJECT NO. SHEET NO. CALCULATED BY: CHECKED BY: DATE:	EMC # 3105	OF .	
000		MC	OTORS				
MOTOR #	/	HP		_ PH		RPM	
MODEL#			VOLTS		_ AMPS _		_
SERIAL#	· · · · · · · · · · · · · · · · · · ·		PRESENT	ΓHR.		то	2400
MFG	(ARRIEK		REQUIRE	D HR.		то	
FRAME			EFF.		_		
DESCRIPTIO	NAHU- CARRIER	44 C	OMMENT:	S CANA	IOT RET	9D MAN	ENATE
	SECTION 6 SELF						
MOTOR #	2	HP_	0.5	PH	/	RPM	
MODEL#	50EE024-331-M	02	VOLTS	208/230	AMPS _	4.6	
SERIAL#			PRESEN	T HR.		то	
MFG	CARRIER		REQUIRE	ED HR.		ТО	
FRAME			EFF.				
DESCRIPTIC	ON AHU-PAD MOONT	ر ر	OMMENT	TS .			
	SETTON 6	5					
			=				1 2
MOTOR #	3	HP	/	PH	3	RPM	1740
MOTOR #	3-339206-1	_ HP	/ VOLTS	PH 208	3 amps	· \	
		_ HP	/ VOLTS PRESEN	208	<u></u>	· \	
MODEL#		HP		208 NT HR.	<u></u>	3.75	
MODEL #	3-339206-1	HP	PRESEN	208 NT HR.	<u></u>	3.75 TO	

JOB

Ft. McPherson/Ft. Gillem Energy Study

EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY			JOB PROJECT NO. SHEET NO. CALCULATED BY:	Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000 OF C. S			
BLDG.# <u>213</u> ECO 5	 MOTORS			1-6-9			
MOTOR # /5	HP_	1/12	PH		RPM	1725	
MODEL# M09/8/ 1-89		VOLTS	115	_ AMPS _	1,75	_	
SERIAL #		PRESEN	T HR.		то		
MFG Bell Gossett		REQUIRE	ED HR.		то		
FRAME		EFF.		_			
DESCRIPTION HWP		COMMENT	s Room	128			
MOTOR # 16 MODEL # MO91811-89 SERIAL # MFG Bell Gossett FRAME DESCRIPTION HWP		VOLTS PRESEN REQUIRE		AMPS _	<i>1,</i> 75 ⁻ то то	1725	
MOTOR #		VOLTS	200-23				
MFG TRane		REQUIR	RED HR.		ТО		
FRAME		EFF.					
DESCRIPTION AHU #3		COMMEN	τs <u>ρου</u>	m 128			

BLDG # 2/3 ECO 5		N	MOTORS	JOB PROJECT NO. SHEET NO. CALCULATED BY: CHECKED BY: DATE:	EMC # 310	5.000 OF	Energy Study
MOTOR # 7	 	HP	3/4	PH		RPM	
			VOLTS		AMPS _		
SERIAL#			PRESEN	T HR.		то	
MFG			REQUIRE	ED HR.		то	
FRAME			EFF.				
DESCRIPTION Reful	n #2		COMMENT	s Coulc	d not	read	
MOTOR #		HP_		PH		RPM	
MODEL#			VOLTS	120	AMPS		-
SERIAL #			PRESEN	IT HR.		то	
MFG			REQUIR	ED HR.		то	
FRAME		,	EFF.				
DESCRIPTION FCU	1-6		COMMENT	rs CEILIN	to MOUN	IT UNIT	-
	•				T CONT		
MOTOR# 9		HP	7.5	PH	3	RPM	1750
MODEL# <u>6-330</u>	771-03		VOLTS	230/46	AMPS	21/1015	
SERIAL #			PRESE	NT HR.		то	2400
MFG GOUL	_D		REQUIF	RED HR.		то	
FRAME			EFF.				
DESCRIPTION HEA-	TING SUPP	14	COMMEN	rs <u>Win</u>	ITER	ONLY	

RUNNING

EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY SLDG.# 7 ()				JOB PROJECT NO. SHEET NO. CALCULATED BY: CHECKED BY:	Ft. McPherson/Ft. Gillem Energy Stude EMC # 3105.000 of			
BLDG.# ECO 5	(3	ľ	MOTORS	DATE:				
MOTOR #	VHN-S	HP	7.5	PH	3	RPM	1750	
	6-330771-03					1/10,5		
SERIAL #	,		PRESEN			то		
MFG	Century		REQUIR	ED HR.		то		
FRAME	<u> 717</u>		EFF.	82.9	_ P	0.7	_	
DESCRIPTIO	DN		COMMENT	rs				
		W4						
MOTOR #	AHU 8	HP	5	PH	3	RPM	1750	
MODEL#	6-322465-03		VOLTS	230/460	AMPS _	14.4/-	2	
SERIAL#			PRESEN	IT HR.		то		
MFG	(enloy		REQUIR	ED HR.		то		
FRAME	5184T		EFF.	81.6	PF 7	9.7	_	
DESCRIPTION	ON Fire Range		COMMEN	rs				
MOTOR #	AHU-1	HP	5	PH	3	RPM	1745	
MODEL#	EK184AL 217C		VOLTS	230/46	AMPS _	14.2/	7. /	
SERIAL #			PRESE	NT HR.		то		
MFG	GE		REQUIF	RED HR.		то		
FRAME	184T		EFF.					
DESCRIPTION	ON		COMMEN	ts Serv	ice fact	v 1.1		

EMC	EN	GINE	ER	S,	INC.	
DENVE	R * A	TLAN	TA *	GEI	RMAN	Υ

BLDG.# 213 EC0 15

JOB	Ft. McPherson/Ft. Gillem Energy Study
PROJ.#	EMC # 3105.000
SHEET NO.	OF .
CALCULATED BY	: JW
CHECKED BY:	
DATE:	1/3/92

EN.						ON/OFF				UNOCC
EAL	ROOM #				BULB TYPE	DURING	SWITCH	GOOD FOR	NO. OF	LIGHTS
7		FIXTURES	FIXTURE	BULB		SURVEY	YES/NO	OCC. SENSOR	SWITCHES	ON
7		8	2_		F	ON		N	1	\mathcal{N}
24	WI-A	4	4		F	ON		\sim	/	\sim
24	13	8	2		F	ON		\sim	/	N
8	2	3	2		F	ON		У	/	N
12	\	3	ک		F	ON		У	1	N
1)	4	2	4		F	ON		Y	(N
	5	A								
eception	6	#								
	7	12	4		F	ON		N	2	\mathcal{N}
	8	2	4		F	ON		\mathcal{N}	1	\mathcal{N}
	9	3	4		F	ON		N	/	N
13	10	5	4		F	ON		\mathcal{N}	1	X
	1)	6	2		F	ON		\sim	1	N
	12	6	2		F	ON		\mathcal{N}	1	N
17	13	6	4		F	ON		\sim	(\sim
21	14.	3	4		F	ON		N	/	\mathcal{N}
23	15	2	1	40	エ	OFF		N		N
19	16	Ì	ì	34	F	OFF	4	Y	1	<i>N</i> .

# OF EXIT SIGNS -			
COMMENTS:			

BLDG.# 2/3 EC0 15

JOB	Ft. McPherson/Ft. Gillem Energy Study			
PROJ.#	EMC # 3105.000			
SHEET NO.	OF			
CALCULATED BY	· JW			
CHECKED BY:				
DATE:	1/3/92			

LIGHTING

Actual						ON/OFF				UNOCC
Room	ROOM #	# OF FIXTURES	ſ	1	BULB TYPE	DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF	LIGHTS ON
20/2	217818		E AS		5	OOTVET	120/110	OCC. CENCON		
67	19	11	4		F	0 N	У	\sim	7	N
70	20	2	2		F	ON	Y	\mathcal{N}	1	N
77	21	4	+	150	- -	ON	У	N	1	À
71	22	2	2		F	Ø N	Y	\sim	/	У
72	23	2	2		F	ON	Y	W Y		У
73	2005	2	4		F	ON	Y	Y	1	Y
75	249	4 8	4		F	ON	У	\sim	1	Y
74	26	2	2		F	ON	À	Y	1	У
76X	27	19	2		F	ON	γ	\sim	1	Y
PHOTO LAB	28	14	2		F	ON	γ	\sim	2	
93	29	4	4		F	OFF		₩N.	1	N
96	30	1	4		F	OFF		\mathcal{N}	/	\mathcal{N}
97	31	P								
MICRO- PHOTO	32	1	4		F	OFF		\mathcal{N}	1	N
98	33	2	4		E	0FF		N	/	N
(00)	34	16	4		F	ON		\wedge	4	\mathcal{N}
	35+		1	10	I	OFF		\mathcal{N}		\sim

OF EXIT SIGNS -

COMMENTS: # GUN ROOM

EMC	ENGINEERS,	INC.
DENVE	R * ATLANTA * GE	RMANY

BLDG.# 2/3 EC0 15

JOB	Ft. McPherson/Ft. Gillem Energy Study
PROJ.#	EMC # 3105.000
SHEET NO.	OF
CALCULATED BY	- JW
CHECKED BY:	
DATE:	1/3/192

4 chul						ON/OFF				UNOCC
Room	ROOM #	# OF	l	1 1	BULB TYPE	DURING	SWITCH	GOOD FOR	NO. OF	LIGHTS
·		FIXTURES	FIXTURE	BULB		SURVEY	YES/NO	OCC. SENSOR	SWITCHES	ON
HEM	3	/	4		F	ON		\sim	/	N
91	40	2	4		F	ON		N	/	N
79	41	2	4		F	ON		N	/	N
78	42	3	4		F	ON		\sim	2	N
108	43	4	4		F	ON		\sim	Z	N
107	44	2	4		F	ON		У	1	N
l.	45	2	4		F	OFF		N	1	
110	46	3	4		F	ON		N	1	
106	47	2	4		F	ON		N	1	N
104	48	1				00		\mathcal{N}	1	N
	0219	A				JN		N	1	N
101	50	1	2		F	0~		N	1	N
105	51	A .	4		F	DN		Y	(WY
64	52	20	4		F	ON		N		NO
59	11 / /	5	4		P	ÖFF		N	/	NO
Fortue	54	3	4.		F	OFF		N	/	N
Lise		3	4		F	OFF		N	1	N
Auto	56	6	LOWI	RESS.	I	OFF		\mathcal{N}	(N
	<u> </u>		50	DIVN	(

# OF EXIT SIGNS -	
COMMENTS:	

JOB Ft. McPherson/Ft. Gillem Energy Study
PROJ.# EMC # 3105.000
SHEET NO. OF
CALCULATED BY:
CHECKED BY:
DATE: 1-6-9

BLDG.# <u>2/3</u> EC0 15

					ON/OFF	SWITCH	GOOD FOR	NO. OF	UNOCC LIGHTS
ROOM #	# OF FIXTURES			BULB TYPE	DURING SURVEY	YES/NO	OCC. SENSOR	1	ON
110	3	4	34	<i>l</i> =	on	V-	N	1	7
	3	2 (4		F	ón	V	N	1	4
113	4	2. U	40	F	6FF	Y	V	1	N
1/4	4	2 (4)	40	F	ON	4	W	1	N
116	4	2 (u,	40	/=	OW	Y	N	1	N
117	20	4	34	F	on	Y	N	2	ĭ
	8	2 (4)	40	F	on	4	N	2_	4
119	3	28'		F	on	4	N	(N
[2]	9	4	34	F	on	4	N	1	N
122	6	(U)4 2	40	F	6N	Y	N	1	\mathcal{N}_{-}
123	21	28'		F	ON	4	N	5	$ \mathcal{N} $
125	2	4	34	F	ON	4	\mathcal{N}		胆子
	1	2	40	F	OFF	4	W		7
127	3	4	34	F	on	Y	N	1	7
	1	2 W	40	F	6FF	Y	N	1	4
128	3	28'		F	OFF	4	N	1	N
129	5	2 81		F	on	V	N	6	4
	12	1	60	I	6N	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	N	6	17

# OF EXIT SIGNS -		
COMMENTS:		

BLDG.# 2/3 EC0 15

JOB	Ft. McPherson/Ft. Gillem Energy Study
PROJ.#	EMC # 3105.000
SHEET NO.	OF
CALCULATED BY:	JW
CHECKED BY:	1 /
DATE:	1/6/92

					ON/OFF				UNOCC
ROOM #	# OF			BULB TYPE	DURING	SWITCH	GOOD FOR OCC. SENSOR	NO. OF	LIGHTS ON
	FIXTURES		BULB		SURVEY	YES/NO	OCC. SENSOR	SWITCHES	ON
103	3	4	34	F	ON	<u> </u>	У		Y
104	2	4	34	F	ON	Y	Y]	N
102	4	4		F	ON	Y	N		Y
105	2	4		F	ON	У	Y		N
198	12	4		F	ON	Y	\sim	2	N
109	6	4		F	OFF	У	\mathcal{N}	2	N
110	10	2		F	OFF	Y	\sim	1	N
112	10,	4		F	ON	У	N	2	N
115	14/2	4/20	34/7	F	ON	BY	N	2	N
118	4	2-4		F	ON	У	Y	1	N
120	9	4	34	F	ON	Y	N	2	N
124	14	4	34	F	ON	Y	\wedge	1	N
126	1	24		F	OFF	y	N	1	N
@129	32	4	34	F	ON	Y	\sim		N
TA A						•			
		_L	1	<u> </u>					

# OF EXIT SIGNS -	2	
COMMENTS:		

BLDG.# 213

EC0 15

JOB	Ft. McPherson/Ft. Gillem Energy Study
PROJ.#	EMC # 3105.000
SHEET NO.	OF
CALCULATED BY	: CS
CHECKED BY:	
DATE:	1/6/92

LIGHTING

fetual Room	ROOM #	# OF FIXTURES	-	1	BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
	58	4	2 W	34	F	ON	Y	N	1	Y
Ste	59	4	4	34	F	ow	Y	N	(N
55	60	2	4	34	F	ON	Y	N	1	N
CLEAN	61	2	4	34	F	οN	U	N		Y
	62	4	4	34	F	ON	Y	N	1	N
52	63	2	4	34	F	ON	Y	N	1	Y
51	64	增16	4	34	F	ON	1	N	3	N
	65	2	4	34	F	ON	Y	V	1	Y
	66	2	4	34	F	ON	4	Y	1	N
45	69	2	4	34	F	ON	Y	Y	1	N
48	9070	基 46	4	34	F	on	Y	N	2	N
		22	ŀ	20	F	ON	4	N	2	N
42	74	28	4	34	F	ON	Y	N	1	N
		6	1	30" 30	F	ON	Y	N		N
	79	4	4	34	F	ON	4	Y	1	N
27	60	月13	4	34	F	ON	4	N	2	N
30	85	2	4	34	F	6N	Y	Y		N
	86		2	34	F	OFF	Y	N	(N

OF EXIT SIGNS - BAY 5 HAS 58. 8 W CIGHTING

JOB Ft. McPherson/Ft. Gillem Energy Study
PROJ.# EMC # 3105.000
SHEET NO. OF
CALCULATED BY: C 5
CHECKED BY:

1-6-91

DATE:

BLDG.# <u>2/3</u> EC0 15

LIGHTING

ROOM #	# OF FIXTURES	1		BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
88	4	4	34	F	ON	4	N	1	V
90	6	4	34	F	OFF	Y	N	1	N
92	6	4	34	<i>[</i> =	on	<i>Y</i>	V	(N
93	-81	4	34				,		
	2	2	34						
93	2	Z W	34	F	00	Y	Y		<i>Y</i>
94	235 **	2_	34	F	ON	Y	N		N
95	4	4	34	F	6N	Y	Y	/	y
96	1	1	60	Ī	oN	Υ	4	1	Y
97	5	4	34	F	ON	V	N	2	Y
98	7	1	75	I	OFF	Y	N	1	N
99	12	4	34	F	ON	Y	N	15	N
		\$2	40	F	OFF	Y	N	2	N
100	1	2 4	34	F	OFF	Y	ν	1	N
101			60	I	OFF	4	N	(N
102	4	4	34	F	ON	V	N	2	y
106	10	4	34	F	ON	Y	N	2	N
107	2	4	34	F	ON	Y	N		MY

OF EXIT SIGNS -

COMMENTS: * Half of the possible lights are on approx. 200 lights off

BLDG.# 213 EC0 15

JOB	Ft. McPherson/Ft. Gillem Energy Study							
PROJ.#	EMC # 3105.000							
SHEET NO.	OF							
CALCULATED BY:	JW							
CHECKED BY:								
DATE:	1/3/92							

CTUAL						ON/OFF				UNOCC
ROOM	ROOM #	# OF FIXTURES	LAMPS/ FIXTURE		BULB TYPE	DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	LIGHTS ON
66	57	2	4	34	F	OFF	У	N	/	N
46	67	3	4	34	F	8N	У	N	/	У
47	68	2	4	34	F	ON	У	У	J	У
,	7/	2	4		F	ON	У	N	1	N
	72	2	4		F	OFF	У	\sim	1	N
	73	1	4		F	OFF	Y	\mathcal{N}	1	N
41	75	14	4		F	ON	Y	\sim	2	N
39	76	23	4		F	ON	У	N	2	\mathcal{N}
	77	2	4		F	OFF	Y	У	1	N
32	78	6	4		F	MON	У	₩ Y	2	У
26	81	2	4		F	ON	Y	У	1	У
25	82	2	4		F	OFF	У	У	/	NO
28	83	2	4		F	ON	Y	У	1	No
29	84	3	4		F	ON	У	У		NO
33	87	3	4		F	0 N	Υ	N	l	\mathcal{N}
35	89	2	4		F	OFF	Y	X	1	N
	90	5	4		F	ON	Y	\wedge	1	N
36	91	a	4		F	OFF	У	У		N

# OF EXIT SIGNS -	
COMMENTS:	

		SHEET NO.		OF
	E M C ENGINEERS, INC.	CALCULATED BY		DATE
,	Denver • Colorado Springs • Atlanta • West Germany	CHECKED BY		DATE
	Blds 213	SCALE		
	Air comp			
	7.5 HB 39 1730	, Rpm		
	Model # BL - 75-18-213T	WEG -	Brazil	
	230/460V 20/10 Amps			
	eff —			
	Head Pump			
1	Carrier Tech 200.			
,	Modelt: 38YHOZ	4300		
	230V 1\$ 60 HZ 1	3.7 RLA	61 LRA	- Compress-
	230V 14 9.FCA - 1			
	Heat Dumy Z			
	•			

Hussmann 208V

E M C ENGINEERS, INC.

Denver • Colorado Springs • Atlanta • West Germany

Pldg 213

JOB	
SHEET NO.	OF
CALCULATED BY	DATE
CHECKED BY	DATE

-1 Air Handler - Inst Room
-2 Air Handler - Chemistry Dr,
-3 Air Handler - Sevelogy
-4 Air Handler - Latent Print,
-5 Air Handler - Supply - Section Front of Building,
-6) Air Handler - Photo Rooms
v7 Air Handler - Querting + Document,
8) Air Handler - Fire Arm,

Hot Water Chilled water Btook Hough

single zon

E M C ENGINEERS, INC. Denver • Colorado Springs • Atlanta • West Germany CIDC BLDG# 213	SHEET NO CALCULATED BY CHECKED BY SCALE	OFOF
MOTOR AHU#3 GOULD -CENTURY M PART#6-322465-0 FM# S184T TYPE	10TORS 1745RPM (0 13 5 HP 14 E:SC 4	0Hz 3¢ 1.4/7.2 Amp 30/460V
PART# 6-322465-	5AP AHUHLO SAME	
AHU#5 INA APPROX 5H NOTE: UNIT HAS A FROM CHW PNEUMATIC	SEVERE LEAK PROZ	EARCING
FROM CHW PNEUMATIC SOME TIME BECAUSE P	PIPE IS RUSTING B.	4BC9 000 0012122

	E	. M	C	ENGI	N	EERS	,	INC		
nvar		Color	ada	Springe		Atlanta		West	Carma	n

Denver • Colorado Springs • Atlanta • West Germany

BLDG 213

SHEET NO.	OF
CALCULATED BY	DATE $1/6/92$
CHECKED BY	DATE

BAY 4 CHICLER (SOUTH)

TSI (TECHNICAL SYSTEMS, INCORPORATED)

R-22 S#8775 M# CAZCMIZ

20460V 60Hz 36

4 COMPRESSORS AT 67.5 RLA 283 LRA

44.3 214

12 FANS AT IHP each

2.3 FLA

SOUTH END BOILER ROOM: CONDENSATE TANK SHOULD BE INSUCATED. APPROX 5'DIA. & 10'LONG

RM 128 MECH ROOM: HW PIPES NEED TO BE INSULATED. 2"PIPE

BAY 2, COMPUTER STORAGE ROOM HAS INADEQUATE LIGHTING, THE OCCUPIERS HAVE INSTALLED THEIR OWN FLOURESCENT LIGHTS & THE OLD INCANDESCENT LIGHTS ARE A SAFETY HAZZARD BECAUSE OLD LIGHTS **BUILDING 214**

EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY	JOB PROJ.#	Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000		
BLDG.# <u>214</u> ECO 4	SHEET NO. CALCULATED BY: CHECKED BY: DATE:	0F CS 1-9-92		
DOMESTIC HOT W	/ATER			
FAUCET LOCATION		WATER TEMPERATURE		
MEN'S BATHROOM SOUTH		139°F		
BREAK ROOM (Mid. of Bldg	,)	130°F		
VEGETABLE CLEANING RM		146°F		
PROBLEMS:				
I Nobelino.				
COMMENTS: BREAK ROOM IS FAR	R FROM	HEATER BECAUSE		
HOT WATER TOOK TWO	MINUTE	S TO REACH		
THE BREAK ROOM.				

DENVER * ATLANTA * GERMANY EMC # 3105.000 PROJECT NO. SHEET NO. CALCULATED BY: CHECKED BY: 214 0 1-9-92 BLDG.# DATE: ECO 5 **MOTORS** ____ HP 1/6 1725 PH MOTOR # RPM MODEL# M10293 1-83 VOLTS $1/5 \vee$ AMPS 2.4SERIAL # PRESENT HR. TO BG MFG REQUIRED HR. TO FRAME EFF. DESCRIPTION DHW CIRC. FUMP. COMMENTS PRESSURE CONTROL. HP_____PH MOTOR # RPM MODEL# VOLTS AMPS TO SERIAL # PRESENT HR. MFG REQUIRED HR. TO _____ EFF. FRAME DESCRIPTION COMMENTS HP PH **RPM** MOTOR # VOLTS AMPS MODEL# PRESENT HR. TO SERIAL # MFG REQUIRED HR. TO FRAME EFF. COMMENTS DESCRIPTION

JOB

Ft. McPherson/Ft. Gillem Energy Study

DENVER * A	TLANTA * GERMANY	PROJECT NO.	EMC # 3105.000		
		SHEET NO.		OF	
		CALCULATED BY:	VC		
	1	CHECKED BY:			
BLDG.#	214 0	DATE:	1-9-9	2	
ECO 5					<u> </u>
		10+ HP I	MOTORS		
		*MEAS			
MOTOR#	1		PHASE A	PHASE B	PHASE C
			.50	471	
DESCRIPTION	on HWP	VOLTS	472	7 (1	
		_	1.0	14-3	
MFG	US ELECTRIC MOTOR	S AMPS	16	17-	
			~ ^		
MODEL#	B0466/N09N191R03	7 FKVAR	7.5		
		<u>-</u>	10 //		
SERIAL #		KVA	124		
			. ^		
FRAME	254JP	кw	(0)		
		_	CA -7	1	
HP	/5 RPM	PF	80.7		
				_	
VOLT	230 / 460				
				0 744	20
AMPS	39.2/19.6		PRESENT	0 to 240	
		_			
EFF.	89.5		REQ HR.	ТО	_
COMMENT	s HW PUMP.				
MOTOR#	2.		PHASE A	PHASE B	PHASE C
			1, -1, 1,		
DESCRIPTI	on AHO	VOLTS	474	475	
	ON 4HU CENTURY 6313482-02		25.9	25.7	
MFG	6313482-66	AMPS	25.7	03.7	
	1		(
MODEL#		KVAR	15.6		
			2.2		
SERIAL#		KVA	22.1		
	_		1/1/9		
FRAME	324T	KW	14.9	1	
	-	 	100		
HP	40 RPM 1765	_ PF	69.5	_	
VOLT	460				
	4.5.4			n 70	100
AMPS	49		PRESENT	0 to 24	-
	(0.3				
EFF.	89.3		REQ HR.	TO	_
COMMENT	S AHU HW/DX				
				 	

JOB

Ft. McPherson/Ft. Gillem Energy Study

EMC ENGINEERS, INC. Ft. McPherson/Ft. Gillem Energy Study JOB **DENVER * ATLANTA * GERMANY** EMC # 3105.000 PROJ.# SHEET NO. KC CALCULATED BY: CHECKED BY: 2146 1-9-97 BLDG.# DATE: ECO 10 **AIR STRATIFICATION** BAY 7 LOCATION REQ. TEMP. UH TEMP. AT TSTAT SOURCE TEMP. AT CEILING 73.7 F OPP. HOURS 0700 TO 2400 TEMP. AT FLOOR 70.3 ' [SKETCH ROOM - DIMENSIONS, T-STATS, DUCTS, FANS, ETC. 1 VENT U1+ 1 UH 30 BAY 7 COMMENTS:

EMC ENGINEERS, INC. Ft. McPherson/Ft. Gillem Energy Study JOB EMC # 3105.000 **DENVER * ATLANTA * GERMANY** PROJ.# SHEET NO. KC CALCULATED BY: CHECKED BY: 214 6 BLDG.# DATE: ECO 10 **AIR STRATIFICATION** BAY 6 LOCATION REQ. TEMP. SOURCE UH TEMP. AT TSTAT OPP. HOURS 0700 TO \$2400 TEMP. AT FLOOR 72.3 F SKETCH ROOM - DIMENSIONS, T-STATS, DUCTS, FANS, ETC. UH COMMENTS:

Ft. McPherson/Ft. Gillem Energy Study EMC ENGINEERS, INC. JOB EMC # 3105.000 **DENVER * ATLANTA * GERMANY** PROJ.# SHEET NO. KC CALCULATED BY: CHECKED BY: 1-9-92 2146 BLDG.# DATE: ECO 10 **AIR STRATIFICATION** BAY 4 REQ. TEMP. LOCATION SOURCE UH (HW COIL) TEMP. AT TSTAT TEMP AT CEILING 70.7 OPP. HOURS TISTAT CONTROL 70.1 TEMP. AT FLOOR SKETCH ROOM - DIMENSIONS, T-STATS, DUCTS, FANS, ETC. , DROP CEILING. UAS BLOW DOWN COMMENTS:

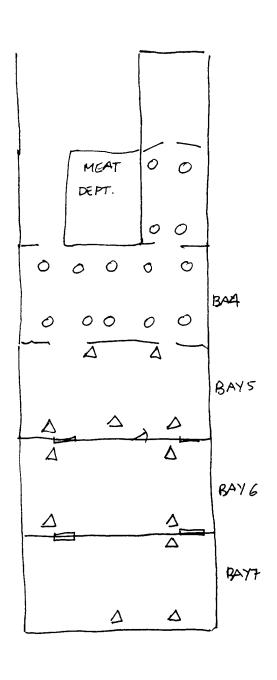
E M C ENGINEERS, INC.

Denver • Colorado Springs • Atlanta • West Germany

BLDG 2146.

JOB		
SHEET NO.		OF
CALCULATED BY	K_	DATE 1-9-92
CHECKED BY		DATE

SCALE _



A-GAS FIRED UH.

TRANE

MOD. # GPN(02 ZADB10000

INPUT 225,000 BTU/H

CUTPUT 173, 250 BTU/H

275 W

THERMAL EFF. 77%.

FAN (1)

SHELLER-CLOSE CORP.

MOD. # HODIAA 456E 1140 RPM

115V AA 10 V4 HR

0 - UH. HW COIL

EMC ENGINEE Denver • Colorado Springs • Atla BLDG	anta • West Germany	JOBSHEET NOCALCULATED BYCHECKED BY	N	OF
NA	70.3° F + 73.7° F 7 30' CEILING HEAVILY USED 72 75 OF 7 70.8° F 72 OF 70.7	TE#2 NU .3°F + HEATER.	NOT OPEN	DIED

BREAK RM.

NOTE #1

MEAT DEPT

66.50 F AT 3:45PM * 8'X8'

X 8'x8'

X 8'x Y'

COMMISSARY TWAFE HIVSE

WOMEN MEN'S

VEG LOOM

E M C ENGINEERS, INC. Denver • Colorado Springs • Atlanta • West Germany BCDG 214	JOBSHEET NO	OF
NOTES 1) ALL MEAT DEPT. DOORS AND ON THURS. & EXHDAYWE (NFRALED HEATERS IN F.) 2) NEEDS INFLARED HEATER	- LE OPEN FROM 7 DNESDAY, GOOD PLA RONT OF 3BAY DI	:00 - 12:00 CE FOR OORS.

BUILDING 308

EMC ENGINEERS, INC.	JOB	Ft. McPherson/Ft. Gillem Energy Study
DENVER * ATLANTA * GERMANY	PROJ.#	EMC # 3105.000
	SHEET NO.	OF .
	CALCULATED BY:	JW
	CHECKED BY:	
BLDG.#	DATE:	1/7/92
ECO 4		/ /
DOMESTIC H	OT WATER	
FAUCET LOCATION		WATER TEMPERATURE
		140°F 131°F
MEN'S RM. NORTH MEN'S RM. S.E.		131°F
PROBLEMS:		
COMMENTS:		

,

DENVER * ATLANTA * GERMANY EMC # 3105.000 PROJECT NO. SHEET NO. RC CALCULATED BY: CHECKED BY: 308 G 1-8-92 BLDG.# DATE: ECO 5 **MOTORS** 4 HP 1/12 PH / RPM 1725 MOTOR # MODEL # MØ91812-87 VOLTS //5 AMPS 1.75 PRESENT HR. O TO 2400 SERIAL # BA MFG REQUIRED HR. FRAME EFF. DESCRIPTION COMMENTS ____ HP___2___ PH 3 **RPM** MOTOR # MODEL # 40 & R \$ 12 30 VOLTS 230 AMPS 6.2 SERIAL # C693/7/ PRESENT HR. CARRIER MFG REQUIRED HR. TO FRAME EFF. DESCRIPTION AHU Z COMMENTS TISTAT HP 3/4 PH / 6 MOTOR # VOLTS 230 AMPS 5.5 MODEL # 40V0006300 SERIAL# <u>6483578</u> PRESENT HR. TO CARRIER REQUIRED HR. MFG TO FRAME EFF. DESCRIPTION AHV 3 COMMENTS _____ · NEXT TO AIN Z

JOB

Ft. McPherson/Ft. Gillem Energy Study

EMC ENG	SINEERS, INC.			JOB			m Energy Study
DENVER * ATLANTA * GERMANY				PROJECT NO.	EMC # 3105.000		
				SHEET NO.		OF	
	,			CALCULATED BY:	KC		
BLDG.#	308 6			CHECKED BY: DATE:	1-8-	9,2	
ECO 5	WAREHOUSE						
		N	MOTORS				
MOTOR #	,	HP_	1/3	PH	1	RPM	1140
MODEL#	5K-442C		VOLTS		_ AMPS _	8	
SERIAL#			PRESEN	THR.		TO '	2400
MFG	DAYTON		REQUIRE	ED HR.	7:00	⁷ т о	3:45
FRAME			EFF.				
DESCRIPTION	ON FUEL OIL POMP		COMMENT	s			
	Z,	HP	3	PH	3	RPM	3450
MOTOR #		HP.				8. z	
MODEL #	1303/72102		VOLTS	208	AMPS _	0,2	
SERIAL#			PRESEN	T HR.		ТО	2400
MFG	FRANKLIN ELEC.		REQUIRE	ED HR.	<u> </u>	то	
FRAME			EFF.				
DESCRIPTION	ON COND. PUMP (2)	COMMENT	s			
MOTOR #	3	HP	3	PH	3	RPM	1750
	6-3429/2-/2		VOLTS	200	AMPS	96	
WODEL #			PRESEN			то	
SERIAL #	CENTURY		-				
MFG	CARRIER		REQUIR	ED HR.		то	
FRAME	S/82T		EFF.				
DESCRIPTI	ON AHU		COMMEN	тѕ			
	NY						

Denver • Colorado Springs • Atlanta • West Germany

JOB	
SHEET NO.	OF
CALCULATED BY KC	DATE 1-8-92
CHECKED BY	DATE

00	O O O O O O O O O O O O O O O O O O O
92	DOWNSTAIR OFFICE
	UPSTAIR.

	JOB	
E M C ENGINEERS, INC.	SHEET NO.	OF
Denver • Colorado Springs • Atlanta • West Germany	CALCULATED BY	DATE
,	CHECKED BY	DATE
BLDG 308 G	SCALE	
NEED INSULATE HW PIPE	2" 220'	
•		

BUILDING 400

EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY BLDG.# ECO 4	JOB PROJ.# SHEET NO. CALCULATED BY: CHECKED BY: DATE:	Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000 of JW 1/7/9 2
DOMESTIC HOT	WATER	
FAUCET LOCATION		WATER TEMPERATURE
NORTH EAST MEN'S LOCKER RM	1. SHOWER	96°F
PAINT ROUM (NEST) SINK	•	91,5°F
SOUTH WEST WALL SINK		103.5°F
SOUTH EAST WALL SINK		110°F
V		
PROBLEMS:		
COMMENTS:		
•		

DENVER * AT	ENVER * ATLANTA * GERMANY		•		EMC # 3105.000		
	400 G		SHEET NO. CALCULATED BY: CHECKED BY:	KC	OF .		
BLDG.# ECO 5	400 0	 M	DATE: OTORS	1-8-	77		
MOTOR #	4	HP_	1 ½ PH	3	RPM	1620	
MODEL#			VOLTS 208	_ AMPS _	5.1	_	
SERIAL#	56-11888		PRESENT HR.		то		
MFG	MASTER		REQUIRED HR.		то		
FRAME	4710RC		EFF.				
DESCRIPTIO	ON HANGER OOOR MOTO	DR.S(Z)0	COMMENTS APPROXII	MATE à	O TIME	S/DAY	
MOTOR #	5	HP	1/4 PH		RPM	1725	
MODEL #	5K5478		volts //5	AMPS	4.9	_	
MUDEL#				_			
			PRESENT HR.		то		
SERIAL #	DAYTON		PRESENT HR. REQUIRED HR.		то то		
MODEL # SERIAL # MFG FRAME							
SERIAL # MFG FRAME		EC. 5 HQP (REQUIRED HR.	SWITCH	ТО	R RUN)	
SERIAL # MFG FRAME DESCRIPTIO	DAYTON		REQUIRED HR.		TO .(NEVS)	R RUN)	
SERIAL # MFG FRAME DESCRIPTIO	DAY TON ON EXH. FAN1IN ELE	HP	REQUIRED HR. EFF. COMMENTS ON OFF		TO MEVEN RPM		
SERIAL # MFG FRAME DESCRIPTIO	DAY TON DN EXH. FAN1IN ELE	HP_	REQUIRED HR. EFF. COMMENTS ON OFF 1/12 PH		TO MEVEN RPM		
SERIAL # MFG FRAME DESCRIPTIO MOTOR # MODEL # SERIAL #	DAY TON DN EXH. FAN1IN ELE	HP_	REQUIRED HR. EFF. COMMENTS ON/OFF ///2 PH VOLTS //5		TO MEVEN RPM		

JOB

Ft. McPherson/Ft. Gillem Energy Study

EMC ENGINEERS, INC.

EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY		JOB PROJECT NO. SHEET NO. CALCULATED BY: CHECKED BY:	Ft. McPherson/Ft. Gillem Energy Stude EMC # 3105.000 OF		
BLDG.# 400 (GILLEM) ECO 5		DATE:	1-8	-92	
	MOTOF	RS			
MOTOR # /	HP C	PH	3	RPM	1750
MODEL# 3K132AX20446X	VOLTS	200-2	30 AMPS	9-8.9	3
SERIAL #	PRES	ENT HR.		то	
MFG GE	REQU	IRED HR.		TO	
FRAME 1827	EFF.	84			
DESCRIPTION AHU UPSTAIR IN HEAT @ 70'F COOL@ 80'F	DOL COMME	NTS	9T CON	ITRO C	-
MOTOR# 2	HP //12.	PH	/	RPM	
MODEL #	VOLTS	1/5	AMPS _		_
SERIAL #	PRES	ENT HR.		то	
MFG	REQU	IRED HR.		то	
FRAME	EFF.				
DESCRIPTION UH #1 MEN RO	OOM COMME	NTS <i>\$777</i> 1	COIL		
MOTOR # 3	HP 1/2	/ РН		RPM	
MODEL #	VOLTS	1154	_ AMPS		_
SERIAL #	PRES	ENT HR.	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	то	
MFG BEACON MORRIS	REQU	IRED HR.		то	
FRAME	EFF.		<u>.</u>		
DESCRIPTION CH F Z MEN RO	2011 COMME	NTS STM	COIL		

EMC ENGINEERS, INC. Ft. McPherson/Ft. Gillem Energy Study JOB **DENVER * ATLANTA * GERMANY** EMC # 3105.000 PROJECT NO. SHEET NO. KC CALCULATED BY: CHECKED BY: 100 d BLDG.# -8-92 DATE: ECO 5 **MOTORS** 7 HP 10 PH 3 RPM /7-35 MOTOR # MODEL # 4-324-JA3-3 VOLTS 220 AMPS 26 TO 2400 SERIAL # 10AF39516 0 PRESENT HR. CENTURY MFG REQUIRED HR. TO FRAME EFF. DESCRIPTION ATTO OVER BODYSHOP COMMENTS VERY OLD HEATING ONLY STM. SEE LOHP MOTOR FORM. MOTOR # 8 PH 3 **RPM** MODEL# VOLTS AMPS SERIAL# PRESENT HR. TO MFG REQUIRED HR. TO FRAME EFF. DESCRIPTION EXH. FIGN # 2 COMMENTS CAN NOT GET UP THERE нР7.5. PH 3 3500 RPM MOTOR # 9 MODEL# 6-357330-40 VOLTS 200 AMPS 2/SERIAL # PRESENT HR. TO MFG CENTURY REQUIRED HR. TO FRAME M184T EFF. 85°5 DESCRIPTION CONP. PUMP. (Z) 12 COMMENTS FLOAT SWITCHES RUN FOR IMIN. EVERY 4 MIN.

ENVER * A	TLANTA * GERMANY		PROJECT NO.	EMC # 3105.0	EMC # 3105.000			
			SHEET NO.		OF			
			CALCULATED BY:	KC				
LDG.#	400 6		CHECKED BY: DATÉ:	1-8-	9 7			
CO 5								
		МОТО	IRS					
MOTOR #	10	HP 1/	/ 2 PH		RPM			
MODEL#		VOL7	TS //5 V	AMPS				
SERIAL#		PRE	SENT HR.	-	то			
V FG	BELLEGOSSETT	REC	QUIRED HR.		то			
FRAME		EFF						
DESCRIPTION	ON HW CIRC. PUT	VII) COMN	MENTS NO N	AME PLATE	=			
MOTOR #	1/	HP	3 рн	3	RPM	1150		
MODEL#	1115938/A	VOL	TS 220	AMPS	8.4			
SERIAL#		PRE	ESENT HR.		то			
MFG	WESTING HOUSE	REC	QUIRED HR.		то			
RAME								
1 0 (14)L		EFF	·					
	ON CIRC IFAN LOPS.			 WAL S/S	sw.			
	ON CIRC IFAN I OPS.		MENTS MANY	- BAL S/S RUNNING	SW. 2.			
I+2 DESCRIPTI		1918 (2) COMM	MENTS MANY	RUNNINI	₹. 			
1+2 DESCRIPTION MOTOR #		1918 (2) COMM	MENTS MANY NOT		RPM			
MODEL#		1918 (2) COMM HP 1/1	MENTS MAPY NOT 1/2 PH TS //51		RPM			
MODEL #		7918 (2) COMM HP 1/1	MENTS MANY NOT		RPM	-		
I+2 DESCRIPTION MOTOR #		791R (2) COMM HP 1/1 VOL	MENTS MAPY NOT 1/2 PH TS //51		RPM	-		
MOTOR # SERIAL #		791R (2) COMM HP 1/1 VOL	MENTS MANY NOT 1/2 PH TS //5 N ESENT HR. QUIRED HR.		RPM TO			

JOB

Ft. McPherson/Ft. Gillem Energy Study

EMC ENGINEERS, INC.

	INEERS, INC. LANTA * GERMAN	v	JOB BBO FOT NO	Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000			
JEINVER " AI	LANTA " GENIVIAIN	1	PROJECT NO. SHEET NO.	LIVIO # 3103,000	OF .		
			CALCULATED BY:	L.			
			CHECKED BY:	7_6.5	7		
BLDG.# ECO 5	400 5	_	DATE:	1-8-9			
ECO 3							
			10+ HP I *MEAS				
MOTOR#	7	_		PHASE A	PHASE B	PHASE C	
DESCRIPTIO	ON AHU UP	PAIR	VOLTS	206	203		
MFG	CENTUR	? Y	AMPS	21	20.6		
MODEL#	SC-324	-JA3-3	KVAR	•			
SERIAL#	10AF39	5/6	KVA	4, 3			
FRAME			KW	4,2			
HP _	10	_RPM	PF	100 %			
VOLT _	220					,	
AMPS	26		_	PRESENT	0 TO 240	~	
EFF.		_		REQ HR.	700TO 160	0	
COMMENTS	3						
MOTOR#				PHASE A	PHASE B	PHASE C	
DESCRIPTION	ON		VOLTS				
MFG			AMPS				
MODEL#			KVAR		_		
SERIAL#			KVA		_		
FRAME			KW				
HP		RPM	PF				
VOLT							
AMPS				PRESENT	то	_	
EFF.				REQ HR.	то		
COMMENT	S						

Ft. McPherson/Ft. Gillem Energy Study EMC ENGINEERS, INC. JOB EMC # 3105.000 **DENVER * ATLANTA * GERMANY** PROJ.# SHEET NO. CALCULATED BY: CHECKED BY: 400 6 BLDG.# DATE: ECO 10 **AIR STRATIFICATION** ABOUT MIDDLE OF BLDG REQ. TEMP. LOCATION $\mathcal{O}H$ SOURCE TEMP. AT TSTAT TEMP. AT CEILING 74.1°F TO OPP. HOURS TEMP. AT FLOOR 68 F SKETCH ROOM - DIMENSIONS, T-STATS, DUCTS, FANS, ETC. VH UP. STAIR . ROLL UP POOR M-CMC 5' NO MAJOR & HEAT PROBLEM. 2 BIG SLIDING DOORS @ BOTTH COMMENTS: END OF BLDG. ROLL UP DOOR ON SID OF BLDG

JOB	Ft. McPherson/Ft. Gillem Energy Study					
PROJ.#	EMC # 3105.000					
SHEET NO.	OF					
CALCULATED BY	CS					
CHECKED BY:						
DATE:	1-8-92					

BLDG.#	400
EC0 15	

LIGHTING

Œ							+			UNOCC
	ROOM#	# OF FIXTURES		1 (BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	LIGHTS ON
		51	2	34	F	ON	Y	N	6	N
	2	Ь	2	34	F	on	Y	Υ	Circuit Breaker	Y
	3	6	2	34	<u> </u>	on	<u> </u>	Y	11	8
	4	3	4	34	F	OFF	7	V	1	N
	5	1	2	34	F	on	Y	W	1	4
	5	1	2	34	F	on	Y	N	1	<i>Y</i>
	7	2	1	34	F	OFF	Y_	N		N
	8	2	2	34	F	on	Y	N	2	7
out out	9	14	25	Bigger tubes 90	F	on		N	3	N
locs)	10	15	28'		F	on	Y	N	2	N
	11	2	2 8'		F	on	Y	Y		Y
	12	4	2 81		F	on	Y	N		Y
	13	356 4	1281	+-	F	on	Y	1-1	+	4
	14	36	1	2 CU High pressur	g ad.	ON	Y	N	5	N
	15	16	B 2	140	F	on	Y	N	3	1
	16	1)	₂ 5'		F	on	Y	\sim	3	Y
Metal	17	25	1	150	I	on	Y	N	à	N
	18	6	2	34	F	6N	Y	N	11	1 h

OF EXIT SIGNS -

COMMENTS:

BLDG.# 400 EC0 15

LIGHTING

ROOM #	# OF FIXTURES			BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
12	7		200	Ţ	ON	Y	\sim	1	Y
13	31)	200	I	GN	y	N	1	Y
	2	1	200	I	OFF	7	N	1	N
	2	1	200	I	DFF	7	N	1	N
26									
	,								

# OF EXIT SIGNS			
COMMENTS:			

JOB	Ft. McPherson/Ft. Gillem Energy Study					
PROJ.#	EMC # 3105.000					
SHEET NO.	OF					
CALCULATED BY	<u> </u>					
CHECKED BY:						
DATE	1-8-92					

BLDG.# <u>400</u> EC0 15

LIGHTING

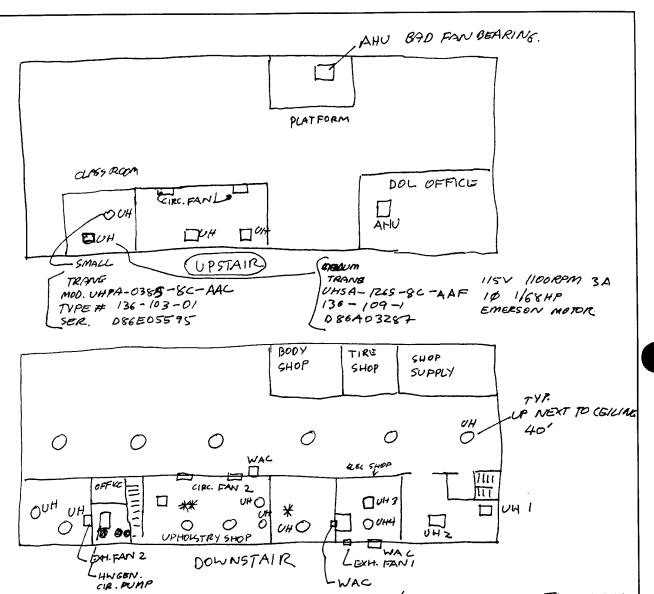
ROOM #	# OF FIXTURES	i .	1 .	BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
19	6	2 81		F	ON	Y	N	1	N
17	18	2 81		F	on	4	N	2	N
	4	2 5'	90	F	ON	Y	\sim	S	N
20	1	2 81		F	on	V	Y	1/2	Y
	ł	2	34	F	on	4	N	1/2	7
21	2	4	34	F	ON	7	7	1	\mathcal{N}
22	Z	2	34	F	OFF	4	N	1	N
23	2	2	34	F	ON	y	N	1	4
24	4	Z	34	F	OFF	Y	Y	1	岩ル
25	1	251	90	F	OFF	<u>ي</u>	N	1	N
	i	2	34	F	OFF	4	N	1	N
26	20	\$Z	340	F	ON	Y	N	3	Y
27	64	# Z	40	F	on	4	N	8	N
2 8	15	2	34	F	OFF	4	\sim	Z	N
29	65	2	34	F	OFF	Y	N	9	N
	51	l	200	I	OFF	Y	N		N
30	34	2	40	F	ON	Y	N	2	7
12	2		200	I	OFF	Ĭ	N		N

# OF EXIT SIGNS -			
COMMENTS:			

Denver • Colorado Springs • Atlanta • West Germany

BLDG 400 G

JOB			
SHEET NO.		OF	
CALCULATED BY	KC	DATE 1-8-0	ìZ_
CHECKED BY		DATE	
SCALE			



* BULBS BURN OUT NO REPLACEMENT OLD FIXTURE, 4 FLOR. BIRGGE DIA. THAN ORDINARY.

** UPHOLSTRY SHOP COLD DRAFT UH NOT ABLE TO KEEP UP

JOB . SHEET NO. __ E M C ENGINEERS, INC. Denver • Colorado Springs • Atlanta • West Germany CHECKED BY _ BLDG 400 SCALE . (= CUMPUTER CEILING IS @ 40-50' High ST416 2 1-C SAME AS = 🗿 W 13 CUBICALS 1-C SOUTH NEST DOORS (3 15 41m 0 1 REFRIG -1+ 10 -1 BREAK RM ₹0) MECH 8 STAIRS SAME AS SAME AS SOUTH WEST DOORS SOUTH WEST 15t floor DOORS PAINT (M. (29) 24 flon 680F) (8) 9 (17) 336 51+01 हि MECH RM. 200 (Z)

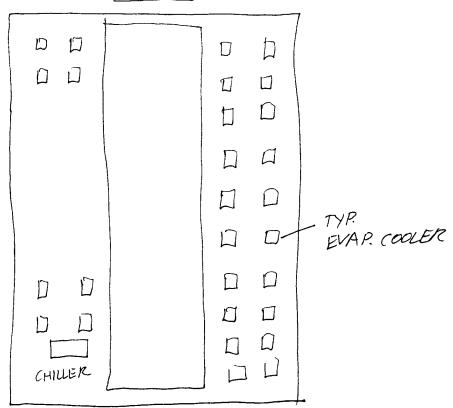
Denver • Colorado Springs • Atlanta • West Germany

BLDG. 400G

JOB		
SHEET NO.		OF
CALCULATED BY	KC	DATE 1-8-92
CHECKED BY		DATE

TOPVIEW

SCALE .



EVAP. COOLER

PHOENIX MANUFACTURE INC. P.O. BUX 20663

PHOENIX, AZ 85036

MOD. # DM 4400 1/4 HP 115V 6.9A 60HZ # DM 4800 1/4HP 115V 8.8A 60HZ

CHILLER (DX)

TRANE

MOD# BTAISOOSOOMA

SER# 528198720

COMP. (2) 27 A 200V 36 LOND. (a) 3.8 A 200V 16

E M C ENGINEERS, INC. Denver • Colorado Springs • Atlanta • West Germany BLDG 400		OF
PAGEZ WESTWAL BAY DOORS > TY		SOUTH EAST BAY WOOR (1
16		DOMINITATION 16
3	45'	TYPOF Z

E M C ENGINEERS, INC. Denver • Colorado Springs • Atlanta • West Germany B L D G 400	JOBSHEET NO	
ECO-19 HEATING SUPPLY SOURCE:	₫	

E	M	C	ENGI	N	EERS	,	INC	•	
	Λ I	1	0		A 11		147	0	•

Denver • Colorado Springs • Atlanta • West Germany

BLDG 400

JOB	
SHEET NO.	7 /
CALCULATED BY W	DATE 1/8/9 Z
CHECKED BY	DATE
SCALE	

BAY DOOR IN FURNITURE SHOP => 12' X/6'
THIS DOOR IS BROKEN & MUST BE PROPPED OPEN IN SUMMER
FOR VENILATION. NEEDS TO BE REPLACED.

BUILDING 401

.

MC ENGINEERS, INC.	JOB	Ft. McPherson/Ft. Gillem Energy Study		
ENVER * ATLANTA * GERMANY	PROJ.#	EMC # 3105.000 OF		
	SHEET NO.			
	CALCULATED BY:			
401	CHECKED BY:	1 0-0-		
LDG.# 401	DATE:	1-8-92		
CO 4				
DOMESTIC H	OT WATER			
FAUCET LOCATION		WATER TEMPERATURE		
Bathroom in office down Showers upstairs	stairs	No hot water 76°		
Showers upstairs		108°F		
,				
PROBLEMS:				
COMMENTS:				

EMC ENGINEERS, INC. Ft. McPherson/Ft. Gillem Energy Study JOB **DENVER * ATLANTA * GERMANY** EMC # 3105.000 PROJECT NO. SHEET NO. KC CALCULATED BY: CHECKED BY: A016 1-8-92 BLDG.# DATE: ECO 5 **MOTORS** _____ HP__1/2 PH 3 RPM 1740 MOTOR # AMPS 55 MODEL# 6N 45TTDR-7392AA VOLTS 208 7:00 1230 TO SERIAL # PRESENT HR. MFG MARATHON REQUIRED HR. TO 145 TEV FRAME EFF. DESCRIPTION COND. PUMP (2) COMMENTS FLOAT SWITCH _____ HP _____ PH **RPM** MOTOR # AMPS VOLTS MODEL# PRESENT HR. TO SERIAL # TO REQUIRED HR. MFG EFF. FRAME COMMENTS DESCRIPTION HP PH **RPM** MOTOR # VOLTS AMPS MODEL# PRESENT HR. TO SERIAL # REQUIRED HR. TO MFG EFF. FRAME COMMENTS____ DESCRIPTION

DENVER * ATLANTA * GERMANY	PROJ.#	EMC # 3105.000			
·	SHEET NO.	OF.			
	CALCULATED BY:	KC			
BIDG# 40/	CHECKED BY:	((() () ()			
	DATE:	1-8-92			
ECO 10					
AIR STE	RATIFICATION				
7					
LOCATION SHOP	REQ. TEMP.				
TEMP AT TOTAT	SOURCE	ИH			
TEMP. AT TSTAT	SOURCE				
TEMP. AT CEILING 75 F	OPP. HOURS	7:00	то 1530		
ii	J J.				
TEMP. AT FLOOR 65 15					
SKETCH ROOM DIMENSIONS, T-STATS, DUC	TS, FANS, ETC.				
	_				
	UH				
40' 75'F					
, ,		\			
	/				
	(
	1				
	(
	ı				
	· •—				
, 65	F :				
<u> </u>					
COMMENTO: SE ALGO CLICA C. I	some is moral a	UDINE CODI	ra Y		
COMMENTS: THE OVERHEAD I	DUCK IS OFFICE T	DUKING 30 KO	<u></u>		

JOB

Ft. McPherson/Ft. Gillem Energy Study

EMC ENGINEERS, INC.

JOB Ft. McPherson/Ft. Gillem Energy Study
PROJ.# EMC # 3105.000

SHEET NO. OF

CALCULATED BY:
CHECKED BY:
DATE: /-9-92

BLDG.# 401 EC0 15

LIGHTING

ROOM #	# OF		t I	BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR	NO. OF SWITCHES	UNOCC LIGHTS ON
1	11	2	34	F	ON	Y	N	7	M
1	1	78	 	F	on	Y	N	J .	N
2	2		100	Ţ	OFF	J.	N	2	N
3	1	,	100	I	OFF	1	N		N
	26	1	press,		on	y	N	8	N.
	24		200	I	on	Y	N	59	N.
5	8	2	34	F	ON	7	N	12	Y
6	3	1	75	I	on	Y	N	2	Y
7	4	1	75	I	ON	Y	N	1	N
8	2	1	100	Ī	ON	4	N	1	Y
9	6	1	100	T	ON	4	N	1	N
10	4	1	100	I	OFF	4	N	/	N
11	4	1	75		OFF	Y	N		N
12	6	2	34		ON	Y	N	11	Y
13	14	28		F	ON	Y	N	3	N
14	38	2	34	F	1/3N	Y	N	4	N
	617	1	100	I	OFF	\$	Do not u	: S e	\mathcal{N}
15	38	2	34		OFF	Y	N	4	N

# OF EXIT SIGNS -	
COMMENTS:	
COMMENTS.	

EMC	E١	IGIN	1EE	RS,	INC.
DENVE	R *	ATLA	NTA	* GE	RMANY

JOB	Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000						
PROJ.#							
SHEET NO.	OF						
CALCULATED BY	: <u>CS</u>						
CHECKED BY:							
DATE:	1-8-92						

BLDG.# <u>401</u> EC0 15

LIGHTING

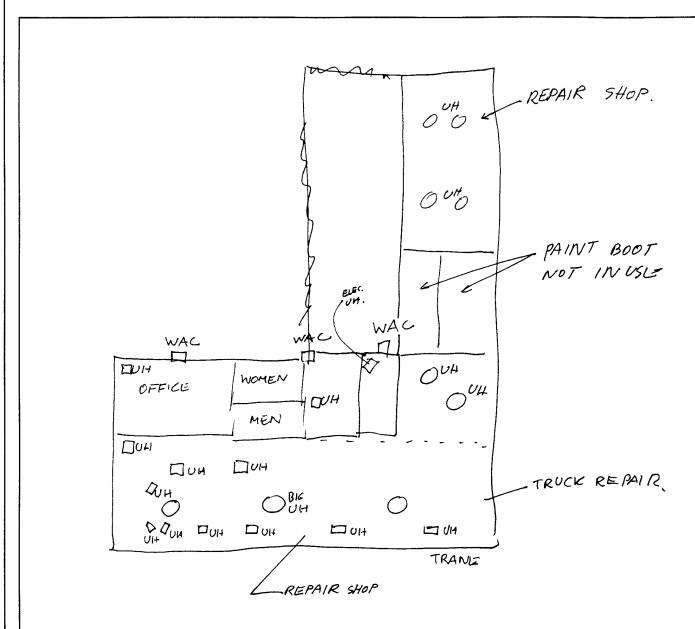
ROOM #	# OF			BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR		UNOCC LIGHTS ON
	12	1	100	Γ	OFF	00	not use	ord Pair	t om
16	20	2 %'		F	ON	4	N	4.	N

# OF EXIT SIGNS -	
COMMENTS:	

Denver • Colorado Springs • Atlanta • West Germany

BLDG 4016.

JOB		 	
SHEET NO.		OF	
CALCULATED BY	KC	 DATE _	1-8-92
CHECKED BY		 DATE _	



SCALE _

E M C ENGINEERS, INC. CALCULATED BY W Denver • Colorado Springs • Atlanta • West Germany BLDG 401 ZM (1) (3) (2) 3 3 18/1/8/ 18 × 18 PIPES 16×18' 12×14 18×18'

Denver • Colorado Springs • Atlanta • West Germany

BCDG 401 G.

LOCKER BREAK ROOM GRASH ROOM
ROOM SPRAGE ROOM
UPSTAIR

SCALE _

BUILDING 403

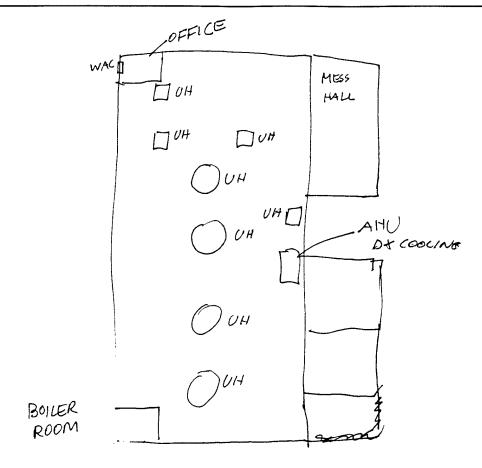
EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY BLDG.# 403-4 ECO 4	JOB PROJ. # SHEET NO. CALCULATED BY: CHECKED BY: DATE:	Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000 of 1/7/97		
DOMESTIC HOT	WATER			
FAUCET LOCATION		WATER TEMPERATURE		
SOUTH WEST MEN'S ROOM		120°F		
NORTHWEST MESS HALL		120°F 136°F		
NORTH BATHROOM		156°F		
PROBLEMS:				
	_			
·				
COMMENTS:	7:30 - 4	1:30pm		
THIS BUILDING IS 4 MESS * OLD WATER HEATER ELECTR	(4AC(500)	PACILITY PAGE SETTITY		
Y NIN WINTER VENTO / ELICA		GT TO 14164		

	NEERS, INC. ANTA * GERMANY				JOB PROJECT NO.	Ft. McPherson/Ft. Gillem Energy Stud EMC # 3105.000			
					SHEET NO. CALCULATED BY: CHECKED BY:	KO	OF		
LDG.# CO 5	403		N	MOTORS	DATE:	_1-7	92.		
							1.4		
MOTOR #	(HP_	1/2	_ PH	10	RPM	1725	
MODEL#	A4C17DKI	4 A		VOLTS	1.15	_ AMPS _	8.8		
SERIAL#		-		PRESENT	HR.		то		
MFG _	LESSON			REQUIRE	D HR.		то		
FRAME	LS 56C			EFF.	62				
DESCRIPTION	I COND. PUMP	1.82		COMMENTS	E PLOA	4T SW	/ .		
MOTOR #	2								
MODEL#	11A5077			VOLTS	220	AMPS	5.9		
SERIAL#				PRESEN	ΓHR.		то		
MFG	AMERICAN	STANDI	ARL	REQUIRE	D HR.		то		
FRAME				EFF.					
DESCRIPTIO	N AHU			COMMENT	S OLD A	BBESTOS	IN SU	PACY DUCT	
MOTOR #			HP		PH		RPM		
				VOLTS		AMPS			
MODEL#		 							
MODEL #					IT HR.		то		
				PRESEN			то то		
SERIAL #				PRESEN REQUIR	IT HR.	·	-		

Denver • Colorado Springs • Atlanta • West Germany

BLDG 403 Ft. Gillem.

JOB	
SHEET NO.	OF
CALCULATED BY	DATE 1-7-92
CHECKED BY	DATE
SCALE	



* ONLY OUH IS WORKING, IJ UIT NOT WORKING.
CANNOT GET UH NAMEPLATE NOT ACCESSABLE.

E M C ENGINEERS, INC. Denver • Colorado Springs • Atlanta • West Germany

BLD6 403 G.

JOB	
SHEET NO.	OF
CALCULATED BY	DATE 1-7-92
CHECKED BY	DATE
SCALE	

BLDS 403 FL. GILLEM

BOILER BRYAN FLEXIBLETUBE BOILERS
MOD CLZ70-S-15-FDGO YR 1990
SER G8537 BRYANNO. 89144Z
INPUT 2700 MBH (MAX) 1350 MBH MIN
OUT PUT 2160 MBH.
15 PSI STM

BUILDING 505

EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY				JOB PROJECT NO. SHEET NO.		Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000		
BLDG.# ECO 5	505			CALCULATED BY: CHECKED BY: DATE:	1-8			
MOTORS								
MOTOR #		-IP	1/3	PH	3	RPM	3450	
MODEL#	1303002110	V	OLTS	208	AMPS _	1.5		
SERIAL#			PRESENT	HR.		то		
MFG	FRANKUN E.E.C. REC			D HR.		то		
FRAME	56 J		EFF.		_			
DESCRIPTION	ON COND. PUMP (2)	cc	MMENTS	FLO	ATSH	<u>/. </u>		
735G								
MOTOR #	2,3	HP	0.75	PH	/	RPM		
MODEL#		\	OLIS (240	AMPS	6.8	<u>_</u>	
SERIAL#			PRESENT	r HR.	acc	7 то	2400	
MFG	COMFORT MAKER	REQUIRE	D HR.	0700	то	1900		
FRAME			EFF.					
DESCRIPTION AND FOR RACKET BALL COMMENTS ELEC, HEATER DX COOLING. 208U 30 34A								
	(2 COURTS)							
MOTOR #	3 4	₩ Ĵ	3/4	PH	3	RPM	1750	
MODEL#	NO MOD. # HYDRO FLOW ELECTRIC	Mon.	VOLTS	208	AMPS	2.5		
SERIAL#				T HR.	0	то	2400	
MFG	BELK & GOSSETT		REQUIRE	ED HR.	0 700	у то	2400 1900	
FRAME	203		EFF.					
DESCRIPTION	ON HWPUMP NEAR BIG BO	/LORGO	OMMENT	s				

E M C ENGINEERS, INC. Denver • Colorado Springs • Atlanta • West Germany BLDG 505 SHEET NO. CALCULATED BY DATE DATE DATE SCALE

BOILER# 2 SOUTH

MOHAWK

M# 4-5-5081-G-P 5# 9510

508ft 5/16" Stell Hick

MAX STEAM, 15 PS I

WP

STEAM CAP = 3450 lb/hr.

CTRL. CKT = 19 5A 120V

BURNER = 39 7, 44 3HP 240V

MITOR

E M C ENGINEERS, INC. Denver • Colorado Springs • Atlanta • West Germany BLDG. 505 G.	SHEET NO	DATE _1-8-92
BOILER SMOHAWL BOILER B MOD. 1-5-508 NAT'L BOARD NO. 9607 HEAT SURPACE 508 SON STM CAP. 3450 LB	Ft. YR 1983 85 HMS.	
BOILER-MODEL 1-5-50 MAX FIRING RATE 420 MIN "	00 CUFYHN 306	AL/HR AL/HR 2 FEULOIL.

3105.000

JOB _

E M C ENGINEERS, INC. Denver • Colorado Springs • Atlanta • West Germany F-+ G	SHEET NO CALCULATED BY CHECKED BY SCALE	OF
List of Boilers Shut	off 8 hv.	

Lirt of Boilers Shot off 8 hur.

505
511
512
213
114
101
304
308
403

Leffon

935 - Gyn

205 - liguer store

103 203/4 - Fire dept

735 Chapel (Hicator)



	SHEET NO
E M C ENGINEERS, INC.	CALCULATED BY
Denver • Colorado Springs • Atlanta • Germany	
	CHECKED BY

JOB	
SHEET NO	OF
CALCULATED BY	DATE
CHECKED BY	DATE
SCALE	

See Blog.



	E	М	С	ENG	INE	E	RS, II	4	C.
Denver	•	Cold	orado	o Spri	ngs	•	Atlanta	•	Germany

JOB		
SHEET NO	OF	
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SCALE		

See Blog.

BUILDING 508

	Ε	М	С	ENGINEERS, INC.
Denvei		Cold	าเลด	to Springs • Atlanta • Germany

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SHEET NO.	OF
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See Blog.

BUILDING 509

ŧ	E N	1 C	EN	GIN	EERS,	INC.	

Denver • Colorado Springs • Atlanta • Germany

JOB	
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CALCULATED BY	DATE
CHECKED BY	DATE
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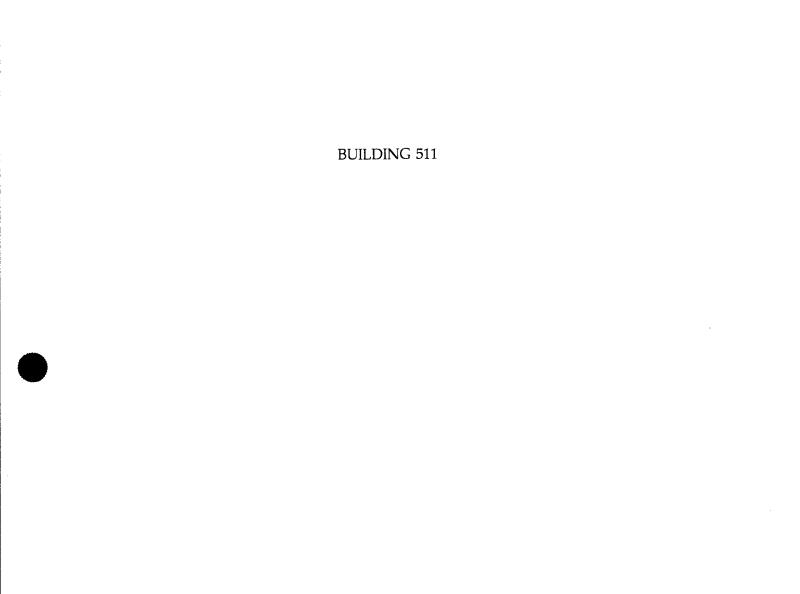
See Blog.

BUILDING 510

	E	М	С	E١	IGIN	EE	RS,	IN	1C	
Denver	•	Colo	rad	Λ C	nrings	_	Atlan	+2	. (Cormonu

JOB	
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CHECKED BY	DATE
SCALE	

See Blog.



E	M	C	ENGIN	IEERS,	INC.	

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JOB	
SHEET NO.	OF
CALCULATED BY	DATE
CHECKED BY	DATE
SCALE	

See Blog.

BUILDING 514

E	M	C	ENGII	NEERS,	INC.

Denver • Colorado Springs • Atlanta • Germany

JOB	
SHEET NO.	OF
CALCULATED BY	DATE
CHECKED BY	DATE
SCALE	

See Blog.

BUILDING 512

BLDG.# 512-67 ECO 1

JOB
PROJ.#
SHEET NO.
CALCULATED BY
CHECKED BY:
DATE.

	Ft. McPherson/Ft. Gillem Energy Study
	EMC # 3105.000
	OF
/ :	CRL
	1/9/92

WALL & ROOF INSULATION

AREAS IN SQ. FEE	T	NORTH	SOUTH	EAST	WEST	52x 2
WALLS See	plan fort	600	86		~	
WINDOWS	505	5Z" x 18"	1 52 x 3	30+20+20+20+ 30+20+12+12 2+	70 - == × 3'	
OVERHEAD DOORS		6-10×10'	1- 2, x12,	7 -0-01	2 - 10 × 0	
PERSONNEL DOORS		1 - 42×96 1 - 72 136	1 (7)	6-72×36"	2- 48-96	

SKETCH WALL CROSS-SECTION	COMPONENTS
	1.OUTSIDE AIR FILM -2.12" BRICK 3. 4. 5. 6. 7.INSIDE AIR FILM
SKETCH ROOF CROSS-SECTION	COMPONENTS
	1.OUTSIDE AIR FILM 2. Z PLY POOK 4. 5. 6. 7.INSIDE AIR FILM
PERSONNEL DOOR TYPE 1/2 METER 1/2 GLASS OVERHEAD DOOR TYPE METER RULL UP	BASEMENT[] SLAB[] CRAWL SPACE[]

COMMENTS:			

0156 BLDG.# ECO 1

80	PROJ.#	SHEET NO.	CALCULATED BY:	
9	P.R.	SHE	SA	

Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000 P 76-6-1 Ŕ CHECKED BY: DATE:

PIPE INSULATION

LOCATION	PIPE DIAMETER	BIPE	FLUID	FLUID	AIR TEMP.	INSULATION	INSULATION	INSULATION
		ENGTH	IYPE	TMT.		11.0.0	THOUSE OF	
AHU	17"	,0E	HΨ		63 F	F) 84.K 9.	<u> </u>	*
AHO	15	\$50	STM		63'F	NONE	Nones	
SOUTH	0	15,	STM		63 F	F18.G. WIDAPER	,,1	NBS0 REFOUR
4748	VAVIOUS		STM					Cass
844 3	2"	30,	STM					NECON REIRO
2408	VARIOUS		WIS				A september of the sept	8000
1468	VARIOUS		STM.					***

COMMENTS: NO INSULATION ON CORNERS (3)

* NO INSULATION

HAS BEEN REINSUATED 米米米

BLDG.# ECO 1

215

Ft. McPherson/Ft. Gillem Energy Study		OF
Ft. McPherson/Ft	EMC # 3105.000	

KC

1-9-92

DUCT INSULATION

INSULATION	5000	*				
INSULATION THICKNESS	3/4	NONE				
INSULATION TYPE	FIBERG. W/FOIL	NONE				
SURROUND AIR TEMP. (°F)		65F				
DUCT TEMP. (*F)		85.F				
SHAPE						
DUCT CROSSECTION	3,×5/	3/×2′				
LOCATION	AHU	4H0				

7	82 XS
	DUCT (IT THE CENETIT OF BAYS)
,	-(27 this
	AIR DUCT
	TE SUPPLY
	NEED TO INSULATE SUPPLY AIR
NTS:	* NOED
COMMENTS	- 1

BLDG.# EC02

G.A55

CALCULATED BY: SHEET NO. PROJ. 80

Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000 CEL

p

CHECKED BY:

- INSUL. BLANKET-- FIBERGLASS BOARDS (SIREEN)

97

WINDOWS SURVEY

	*		4	. [
DIMENSIONS (INCH)		7 2 2	27	30				
DIMEN	Si.	2t 6 high	\ \frac{1}{2}	- (,				
WINDOW	NOUNE	* 1		BLINDS				
GLASS	NOVE	SPERIOR X			NOWE			1
ORIENTATION	774	日本人		ALC	,			
FRAME	15 (F.C.C.)	METAL		METAL				
TYPE-SLIDING FIXED, CASEMENT	4 TASEMENT	FIXED		(ASF NEN)+				
WINDOW SINGLE/DOUBLE PANE NO.	SINGUE (WAPEHOUSTASEMEN,T	*	CLEARSTORY	SINGIE (OFFICE)				
WINDOW NO.		7		M				

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FORM FOR GLASS AREA

EMC ENGINEERS, INC. Ft. McPherson/Ft. Gillem Energy Study JOB **DENVER * ATLANTA * GERMANY** EMC # 3105.000 PROJ.# SHEET NO. UZI CALCULATED BY: CHECKED BY: BLDG.# 512-6 92 DATE: ECO₃ WEATHERSTRIPING AND CAULKING

DOOR\ WINDOW	CONDITION OF W.S./CAULK	INFILTRATION	ORIENTATION	DIMENSIONS (INCH)
POOR	. W.S. NONE	+1,61+	\$ ALL	48×96
MINDOM	WAULK 1977 W.S. NONE	MEO	AN	52×18 Sections x
P. 2018C	W.S, NONE	14164	E	72"× 36"
DOOR.	Wis, BOTTOM	4164	AU	10' x 10'

COMMENTS:	NT FAN OPEN		TOTAL)W
		13"		
	THIS PART NO OPENJS NO WEATHERST	219		

MC ENGINEERS, INC. ENVER * ATLANTA * GERMANY LDG.# 512 CO 4	JOB PROJ.# SHEET NO. CALCULATED BY: CHECKED BY: DATE:	Ft. McPherson/Ft. Gillem Energy Stu EMC # 3105.000 of J W
DOMESTI	C HOT WATER	
FAUCET LOCATION		WATER TEMPERATURE
MEN'S ROOM WEST	BAY #2	101° F
MEN'S ROOM WEST BREAK ROOM NORTHWE	ST BAY # 1	129.4°F
PROBLEMS:	***	
COMMENTS:		

EMC ENGINEERS, INC. Ft. McPherson/Ft. Gillem Energy Study JOB **DENVER * ATLANTA * GERMANY** EMC # 3105.000 PROJECT NO. SHEET NO. KC CALCULATED BY: CHECKED BY: 512 6 1-9-92 BLDG.# DATE: ECO 5 **MOTORS** мотоr # <u>4</u> нр 3 рн 3 RPM VOLTS 208 BH15C AMPS 7.6MODEL # 2400 0 SERIAL # TO PRESENT HR. 700 то 1545 TRANE MFG REQUIRED HR. FRAME EFF. DESCRIPTION AHU SOUTH END COMMENTS NO MOTOR NAME PLATE DX AHU TAG. RECORDED SIM HP PH RPM MOTOR # MODEL# VOLTS AMPS SERIAL # PRESENT HR. TO MFG REQUIRED HR. TO FRAME EFF. DESCRIPTION COMMENTS HP _____ PH **RPM** MOTOR # AMPS __ MODEL# VOLTS SERIAL # PRESENT HR. TO MFG REQUIRED HR. TO FRAME EFF. DESCRIPTION COMMENTS_____

EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY				JOB PROJECT NO.	Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000			
BLDG.# ECO 5	512 G	- M OT	ORS	SHEET NO. CALCULATED BY: CHECKED BY: DATE:	KC	0F		
MOTOR #		_ HP		PH		RPM		
MODEL #		VOI	LTS	115 V	AMPS _			
SERIAL#		PR	ESENT	HR.		то		
MFG		RE	QUIRE	D HR.		то		
FRAME		EF	F.		_			
DESCRIPTION	ON UNIT HEATER A	СОМ	MENTS	CANNO	T GET NA	MEPLAT	ট	
MOTOR #	2	HP	5	_ PH	3	RPM	17400	
MODEL#	UVE 184TTDR7627/	ICL vo	LTS	200	AMPS _	4.8		
SERIAL#		PR	ESENT	HR.	0600	то	2400	
MFG	MARATHON	RE	QUIRE	D HR.		то		
FRAME		EF	F.	85.5				
DESCRIPTION	ON AHU NORTHEND	СОМ	MENTS	TIME	CLOCK	e m	PINS.	
	DX HW							
MOTOR #	3	HP ¹	/12	PH		RPM	1725	
MODEL#	M09186 3-84	VO	LTS	115	AMPS	108		
SERIAL #		PF	RESENT	r HR.		то	2400	
MFG	В & С.	RE	QUIRE	D HR.		то		
FRAME		EF	F.					
DESCRIPTION	ON HW. CIR. PUMP	COM	IMENTS	S SERVE	HEATING	COIL OF	AHU.	
					····			

EMC ENGINEERS, INC.

EMC ENGINEERS, INC.			ЮВ	Ft. McPherson/Ft. Gillem Energy Study			
DENVER * ATLANTA * GERMANY			PROJ.# SHEET NO.	EMC # 3105.000 of			
			CALCULATED BY:		OF		
	5126	C	CHECKED BY:				
BLDG.#	5146	C	DATE:	1-9-92			
ECO 10							
		AIR STRATIFICA	TION				
LOCATION	вач 1 (тур.	FOR ALL BAYS)	REQ. TEMP.				
TEMP. AT TSTAT			SOURCE	UH.			
TEMP. AT CEILING	71'F		OPP. HOURS	0700	то 1545		
TEMP. AT FLOOR	63 F						
25'-36	J UH	XH. FAN		UH			
COMMENTS:	EVERY BAY H	IAS 4 EXH. FA	lNs.				

JOB	Ft. McPherson/Ft. Gillem Energy Study					
PROJ.#	EMC # 3105.000					
SHEET NO.	OF					
CALCULATED BY	: cs					
CHECKED BY:						
DATE	1-9-92					

BLDG.# <u>512</u> EC0 15

LIGHTING

ROOM #	# OF FIXTURES			BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
1	43	2 8'	96	F	ON	Y	N	12°B	\sim
2	4	28'	96	F	ON	Y	4	1	Y
3	4	2 8'	96	F	ON	Y	\sim	岩 2	N
4	4	2 8'	96	F	ON	Y	N	2	N
4	4	4	34	F	ON	4	N	2	\sim
5	12	4	34	F	ON	4	N	2	N
	1	/	34	E	onl	Y	\sim	1	Y
Ь	67	28'	96	F	ON	Y	N	8 c8	N
7	3	281	96	F	on	4	N	1	Y
3	3	2 9'	96	F	cn.	Y	N		N
9	1	4	34	F	on	Y	N		N
10		4	34	F	ON	Y	N	1	Y
11	70	2 81	 -	E	ON	Y	N	1608	N
	1	2	34	F	on	Y	N	1	Y
12	106	28		F	on	Y	N	19	B N
10-	5	4	34	F	on	Y	N		N
	6	1	200	Ī	OFF	Y	1/	'	N
13	4	7 8'	F	F	ON	Y	Ň	1	N

NEXT

# OF EXIT SIGNS			
COMMENTS:			

JOB Ft. McPherson/Ft. Gillem Energy Study
PROJ.# EMC # 3105.000

SHEET NO. OF

CALCULATED BY: C S

CHECKED BY:

DATE: 1-9-9-2

BLDG.# <u>512</u> EC0 15

LIGHTING

ROOM #	# OF FIXTURES			BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
14	2	٦ %,	96	F	ON	Y	N	1	Y
15	22	2 8'	96	F	ON	Y	N	3513	Y
16	24	2	34	F	OW	Y	N	3	N
17	44	2	34	F	on	4	N	15	N
18	9	2	34	F	6N	Y	\$W	6	Y
19	4	28'	96	F	ON	1	4	1	y
[]	6	1	200	I	OFF		N		N
								V	

# OF EXIT SIGNS -	
COMMENTS:	

	FIXU.# SHEET NO. CALCULATED BY:	EMC # 3105.000	of	<u>dy</u>
	CHECKED BY:	1/9/9-	2	
VI. BUILDING D	OATA SURVEY OBSERV	ATIONS		
BLDG NO: 512-G BLDG NAME: WA	AREHOUSE	JOB: 3105	.000	
PRIMARY FUNCTION: BUILDING MANAGER NAME:	_ GROSS SQ FT		NO OF FLRS/	
PHONE:		OFFICE NO.		
PHONE: SPECIAL AREAS: COMPUTER FACILITY [AUDITORIUM [LABORATORIES [CAFETERIA [OTHER []] - ZONE NO'S] - ZONE NO'S		······	
ZONE NO. / FUNCTION: WAR	- ZONE NO S.	ECIAL REQ.	YES [] NO	
LOCATION:	(IDENTIFIE	D ON FLOOR	PLAN [])	
OCCUPANCY HOURS: M-F 7 00 TO 34 6 ,S. PRESENT TEMP: WINTER OCC F UN REQUIRE TEMP: WINTER OCC F UN	AT OTO SUMM OCC F, SUMM	N O TO O LER OCC	of unocc	o _F
REMARKS: WAREHOUSE HEATIN	6 only	•		
ZONE NO. FUNCTION: LOCATION: DCCUPANCY HOURS: H-F TO ,S PRESENT TEMP: WINTER OCC F UN REQUIRE TEMP: WINTER OCC F UN	SF (IDENTIFIE SAT TO ,SU	D ON FLOOR	YES [] NO	
PRESENT TEMP: WINTER OCC F UN	OCCOF, SUMM	IN TO IER OCC IER OCC	F UNOCC	−°F F
REMARKS:	OCCF, SUMP	IER OCC	F UNOCC	
ZONE NO. FUNCTION: LOCATION: OCCUPANCY HOURS: M-F TO ,S PRESENT TEMP: WINTER OCC F UN	(IDENTIFIE	PECIAL REQ.	YES [] NO PLAN []) OF UNOCC	[]
PRESENT TEMPOUTINTER OCC F IN	IOCC OF SIME	NED OCC	OF HNOCC	or
REQUIRE TEMP: WINTER OCC F UN	loccof, sum	1ER OCC	of unocc	oF
REMARKS:			•	
ZONE NO. FUNCTION: LOCATION: OCCUPANCY HOURS: M-F TO S		ED ON FLOOR	YES [] NO PLAN [])	[]
PRESENT TEMP: WINTER OCC F UN	NOCC OF, SUM	MER OCC	OF UNOCC	o _F
REQUIRE TEMP: WINTER OCCOF UN	NOCCOF, SUM	MER OCC	of unocc	°F

REMARKS:

E M C ENGINEERS, INC.

Denver • Colorado Springs • Atlanta • West Germany

JOB	
SHEET NO.	. OF
CALCULATED BY CRU	DATE 1/9/92
CHECKED BY	DATE
SCALE	

512-6

O.H. DOORS & IR. HERTERS

DOOR DOOR DOOR

ZO'
ADD
INFRARED
HEATERS

ZO'

1 HOUR PER DAY

E M C ENGINEERS, INC.

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BLDG 512

JOB Gillem	
SHEET NO.	OF
CALCULATED BY	DATE <u>1-9-92</u>
CHECKED BY	
SCALE	

End. Small piping.

Two foot tear on North end of the Brd bay. Two sections are missing covering paper. Small piping.

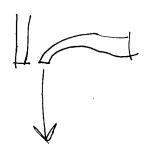
E M	C	ENG	INEERS	, INC.	

Denver • Colorado Springs • Atlanta • West Germany

JOB	
SHEET NO.	. OF
CALCULATED BY	DATE
CHECKED BY	DATE

51	2
----	---

HAS AIR CURTAINS? OH DOOR (WELL SEALED)



DOOKS CEFT OFFIC WILL CH ON

VENTILATION FANS IN CUPILO BARAMETRIC DAMBERS

GAS UH & HW DE STM UH

TEMP 2 75°F ONE BAY (LIQUE SER)
65°F OTHERS

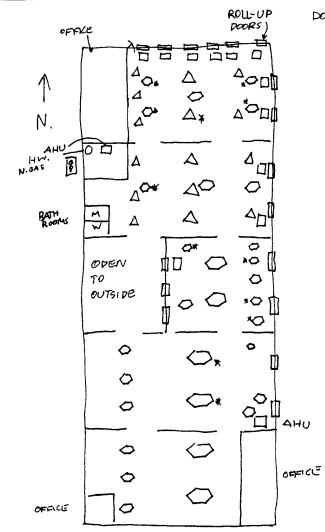
THE CLOCK INOPENABLE

E M C ENGINEERS, INC.

Denver • Colorado Springs • Atlanta • West Germany

BUILDING. 512 G

JOB		
SHEET NO.		OF
CALCULATED BY	<i>V</i> C	DATE 1-9-52
CHECKED BY		DATE
SCALE		



DOORS 10'X10'

DON'T WORK

GAS.FIRE UNIT HEATERS OVER ROLLUP DOOR

WORKING.

STM COIL UH.

 E	М	C	E	NG	INI	EE	RS,	IN	C.	

Denver • Colorado Springs • Atlanta • West Germany

BLDG 5/Z

JOB	
SHEET NO.	OF
CALCULATED BY	DATE $1/9/92$
CHECKED BY	DATE

	63.3°F \$		BAY 4
	71 ° F¶@23	/	
	69.6°F \$	(5) BAY 5	
0			75,7% (1)

OFFICE HRS 7:00-3:45 pm

E M C ENGINEERS, INC. CALCULATED BY W Denver • Colorado Springs • Atlanta • West Germany BLDG 5/2 SCALE ___ BAY#1 62°F\$ 0A TEMP AT 9:45AM 58.5°F 3 OA LUADING DOCK (14) (3)

BUILDING 513

MC ENGINEERS, INC.	JOB	Ft. McPherson/Ft. Gillem Energy Study
ENVER * ATLANTA * GERMANY	PROJ.#	EMC # 3105.000
	SHEET NO.	OF .
	CALCULATED BY:	JW
LDG.# 5/3	CHECKED BY:	1/9/97
	DATE:	-1/1/2
CO 4		
DOMESTIC HOT W	ATER	
FAUCET LOCATION		WATER TEMPERATURE
NAME EAST WOMEN'S ROOM EAST MEN'S ROOM		144°F 151°F
EACT MENS DOWN		1510F
EAS! NEN > KOOK		, , ,
PROBLEMS:		
COMMENTS:		

E M C ENGINEERS, INC.

Denver • Colorado Springs • Atlanta • West Germany

BLPG 513

JOB	
SHEET NO.	OF
CALCULATED BY	DATE 1/9/92
CHECKED BY	DATE

BAY 4, SOUTH TWO ISLES HAVE POOR LIGHTING.

E M C ENGINEERS, INC.

Denver • Colorado Springs • Atlanta • West Germany

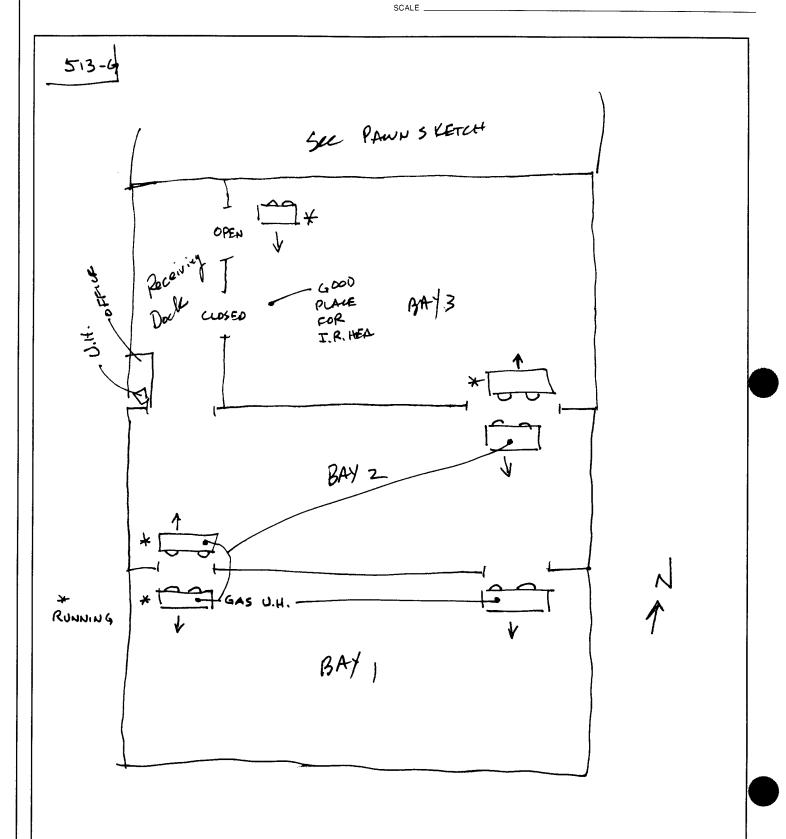
BUX 5136

JOB	
SHEET NO.	OF
CALCULATED BY	DATE 1-9-92
CHECKED BY	_ DATE
SCALE.	

B AY 5	EF A A	△ GAS FIRED ULT I FAN ☐ GAS FIRED UH 2 FANS * RUNMING.
	A A EF A*	
RAY U		
A N	M	
	*	
BAY 3		
·	GEE CARL'S SKETCH.	

E M C ENGINEERS, INC.

Denver • Colorado Springs • Atlanta • West Germany



BUILDING 735

EMC ENGINEERS, INC. Ft. McPherson/Ft. Gillem Energy Study JOB **DENVER * ATLANTA * GERMANY** EMC # 3105.000 PROJ.# SHEET NO. OF CALCULATED BY: JW CHECKED BY: BLDG.# 735 DATE: ECO₁ **WALL & ROOF INSULATION AREAS IN SQ. FEET** NORTH SOUTH **EAST** WEST WALLS **WINDOWS OVERHEAD DOORS PERSONNEL DOORS** COMPONENTS SKETCH WALL CROSS-SECTION .17 1. OUTSIDE AIR FILM ORIGINAL 2 VINAL SIDING 0.61. 4. FRAME 5. GYPBOARD 0.61 SIDING 0,45 OA 6. .68 7. INSIDE AIR FILM 5.85 COMPONENTS SKETCH ROOF CROSS-SECTION .17 1. OUTSIDE AIR FILM 0.44 2. SHINGLE 0.62 3. WOOD DECK 1.24 4. AIR SPACE ER 20,0 5. 6" BLOWN-IN FIB 0.45 7. INSIDE AIR FILM 23,6 (È WOOD METAL BASEMENT[] PERSONNEL DOOR TYPE SLAB [4 CRAWL SPACE [] NONE OVERHEAD DOOR TYPE **COMMENTS:**

735 G BLDG.# ECO 1

Ft. McPherson/Ft. Gillem Energy Study	EMC # 3105.000	OF	<u>ا</u> لا ل		76-6-
JOB	PROJ.#	SHEET NO.	CALCULATED BY:	CHECKED BY:	DATE

DATE

PIPE INSULATION

LOCATION	PIPE DIAMETER	PIPE	FLUID	FLUID	AIR TEMP.	INSULATION	INSULATION THICKNESS	INSULATION
MECH.	٦,"	30′	IS	125F	125F 62F	FIB. PRIEK	ı ,	Coos
Keelii								

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735 G

BLDG.# ECO 1

Gillem Energy Study		90
Ft. McPherson/Ft. Gillem Energy	EMC # 3105.000	

CALCULATED BY: CHECKED BY: DATE:

26-6-1

DUCT INSULATION

LOCATION	DUCT CROSSECTION	SHAPE	DUCT TEMP. (°F)	SURROUND AIR TEMP. (°F)	SURROUND INSULATION AIR TEMP. TYPE (*F)	INSULATION THICKNESS	INSULATION
Medroom	20"X20" 225'Long		*	29	NONE	SINON	
≤	40" X40" 2 15' loy		*	29			

RUNNING.

102

*

COMMENTS:

BLDG.# 735

JOB PROJ.# SHEET NO.	Ft. McPherson/Ft. Gillem Energy Study EMC # 3105.000 or
CALCULATED BY:	MO
CHECKED BY:	
DATE:	26/6/1

WINDOWS SURVEY

DIMENSIONS (INCH)	LEFEKTO WEATHERSTRIP	Form	,				
WINDOW	NONE CURTAINS						
GLASS SHADING	NONE						
ORIENTATION	N/5/E/W						
FRAME MAT'L	O com						
TYPE-SLIDING FIXED, CASEMENT	501012						
WINDOW SINGLE/DOUBLE PANE	SINGLE	1					
WOUNDOW							

COMMENTS:

BLDG.# 735 ECO 3

JOB	Ft. McPherson/Ft. Gillem Energy Study							
PROJ.#	EMC # 3105.000							
SHEET NO.	OF							
CALCULATED BY	J W							
CHECKED BY:								
DATE:	(/9/92							
	1 (

WEATHERSTRIPING AND CAULKING

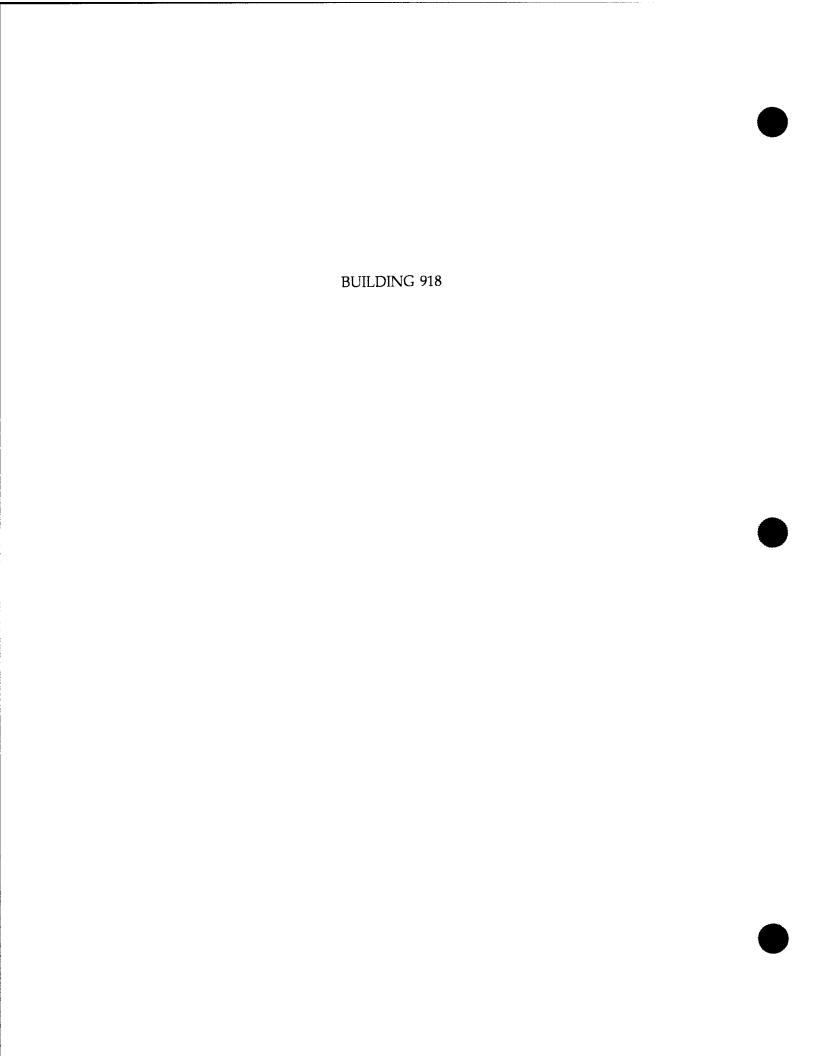
DOOR\ WINDOW	CONDITION OF W.S./CAULK	INFILTRATION	ORIENTATION	DIMENSIONS (INCH)	
D W	FAIR	LOW	E	30153	/
D		MED	E	64X80	1
\mathbb{W}		LOW	E	30×27	1
D		MED	\sim	64 x 80	2
W		LOW	N	30453	/
0		MEO	N	30170	/
W		Low	W	30×54	ک
0		H16-H	5	64×80	2
\mathcal{N}		Low	5	30154	1
W	V	LOW	5	30127	/
				•	

COMMENTS:	DooR	ON	SOUTH	EAST	CORNE	ER HAS	4	AIR
GAI	BET	WEEN	'.					
				ATT				

EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY BLDG.# 735 ECO 4	JOB PROJ.# SHEET NO. CALCULATED BY: CHECKED BY: DATE:	Et. McPherson/Ft. Gillem Energy St EMC # 3105.000 of U W - (9 9 2
DOMEST	TIC HOT WATER	
FAUCET LOCATION		WATER TEMPERATURE
MENS		155°
MENS WOMEN'S		1550
PROBLEMS:		
COMMENTS: EVECTRIC LIR TEMP = 68°F		
LIR TEMP = 1.80F		

EMC ENGINEERS, INC.	JO8	Ft. McPherson/Ft. Gillem Energy Study					
DENVER * ATLANTA * GERMANY	PROJECT NO.	EMC # 3105.000					
	SHEET NO. CALCULATED BY:	Ka	OF				
	CHECKED BY:						
BLDG.# 735	DATE:	1-9-92					
ECO 5							
	•	MOTORS					
1.0700 //	*MEAS	URED*	PHASE B	PHASE C			
MOTOR#/				PTIAGE 0			
DESCRIPTION AHU	VOLTS	2034	2034				
beddin trott pro	-		22				
MFG 60ULD	AMPS	23	23				
		5.4					
MODEL # 63 39075-0	_ KVAR	4.56.6					
OFFINA #	KVA	4 8.2					
SERIAL #							
FRAME 9 2/57	кw	1076.2		:			
		75.6					
HP 10 RPM 1750	_ PF	75.6		Ì			
200							
volt <u>200</u>	_						
AMPS 30		PRESENT	то				
AIVIFS	_						
EFF.		REQ HR.	то				
-16T0 - 01T00/	(A) 7.	سسره به					
COMMENTS TISTAT CONTROL	e fr) / _ .					
LACTOR #		PHASE A	PHASE B	PHASE C			
MOTOR#		FIASEA	THACLO				
DESCRIPTION	VOLTS						
DESCRIPTION OF THE PROPERTY OF							
MFG	AMPS						
MODEL #	KVAR						
SERIAL #	KVA						
SEHIAL #	_ ```						
FRAME	KW						
HPRPM	PF						
VOLT							
VOLT							
AMPS		PRESENT	ТО	_			
				-			
EFF		REQ HR.	то	_			
COMMENTS							

EMC ENGINEERS, INC. DENVER * ATLANTA * GERMANY				JOB PROJECT NO. SHEET NO. CALCULATED BY:	Ft. McPherson/Ft. Gillem Energy Stude EMC # 3105.000 of			
BLDG.# ECO 5	735	— MOTORS		CHECKED BY: DATE:	1-9-92			
MOTOR #	/	HP	10	PH	3	RPM	1750	
	6339075-01							
SERIAL #			PRESENT	ΓHR.		то		
MFG	G004D		REQUIRE	ED HR.		то		
FRAME .	S 215T		EFF.		_			
DESCRIPTION	N AHU MOTOR	· · · · · · · · · · · · · · · · · · ·	COMMENT					
S	EE 10 HP FORM				GRAS B			
MOTOR #	2	HP	1/2	PH	/	RPM	1725	
MODEL#	8-16578-20		VOLTS	115	AMPS _	7.3		
SERIAL#			PRESENT	T HR.	0	то	2460	
MFG	CONTURY		REQUIRE	D HR.		то		
FRAME	J56J		EFF.					
DESCRIPTIO	N HW PUMP		COMMENT	s RUNA	N/No		3	
MOTOR #		HP		PH		RPM		
MODEL#				 .				
SERIAL #			DDECEN			то		
MFG			DEOLUDE	ED HR.		то		
FRAME			EFF.					
	N							



MC ENGINEERS, INC.	JOB	Ft. McPherson/Ft. Gillem Energy Stud			
ENVER * ATLANTA * GERMANY	PROJ.#	EMC # 3105.000			
	SHEET NO.	OF			
	CALCULATED BY:	CS			
Ω 10	CHECKED BY:				
гра.# <u>918</u>	DATE:	1-9-92			
CO 4					
DOMESTIC HOT W	ATER				
FAUCET LOCATION		WATER TEMPERATURE			
SINK IN MECH. ROOM (NEXT TO HE	EATER)	131°F			
MEN'S ROOM		127° F			
ME NO KOOM		1001			
PROBLEMS:					
PHOBLEMS.					
COMMENTS:					
	 				
·					

EMC ENGINEER DENVER * ATLANTA *			JOB PROJECT NO. SHEET NO. CALCULATED BY: CHECKED BY:	EMC # 310	em Energy Study		
BLDG.#		M	OTORS	DATE:		<u> </u>	
			2	PH	3	DDM	1725
	164660-01						
SERIAL #			PRESEN				2400
,	NETEK		REQUIR				PM -11:00 PM 9:00 PM
FRAME PAS			EFF.				
DESCRIPTION AF	<i>1</i> 0.	C	OMMENT	S			
	HEAT PUMP						
MOTOR #		HP		PH		RPM	
MODEL#			VOLTS		AMPS		
SERIAL #			PRESEN	IT HR.		то	
MFG			REQUIR	ED HR.		то	
FRAME			EFF.				
DESCRIPTION		C	COMMEN	TS			
				-			
MOTOR #		HP_		PH		RPM	
			VOLTS		AMPS		
			PRESE	NT HR.		то	
			REQUIF	RED HR.		то	
FDAAAF			EFF.		makes 47/-		
DESCRIPTION				TS			

EMC	ENGINEER	RS, INC.
DENVE	R * ATLANTA	GERMANY

JOB	Ft. McPherson/Ft. Gillem Energy Study								
PROJ.#	EMC # 3105.000								
SHEET NO.	OF .								
CALCULATED BY	: Jw								
CHECKED BY:									
DATE:	1/9/92								

BLDG.# 9/8 BOWCING
ECO 15

LIGHTING

ROOM #	# OF FIXTURES			BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR	NO. OF SWITCHES	UNOCC LIGHTS ON
	2016		34	F	ON	У	N		\mathcal{N}
2	1	2	34	F	OFF	У	y	1.	N
3	2	2	34	F	OFF	Y	N	/	\mathcal{N}
4	2		100	I	OFF	Y	N	1	N
5	7	2	34	F	0N	У	V N		N
6	-3	2	96	F	OFF	У	Y	1	N.
7	7	4	34	F	ON	Y	N		\mathcal{N}
8	2	a	34	F	ON	Y	ØY	/	X
9	2	4	34	F	ON	Y	Y	1	Y
10	2	2	34	F	ON	Y	\sim	1	Y
11	5	4	34	F	ON	Y	\wedge		У
12	2	2-4		F	OFF	У	A N		N
13	2	2-4	34	F	ON	ý	N	1	YA
14	P								

# OF EXIT SIGNS -			
	•		
COMMENTS:			

JOB _ CALCULATED BY CRE E M C ENGINEERS, INC. Denver • Colorado Springs • Atlanta • West Germany CHECKED BY _ SCALE . 918 o store and Bowling & Game 0)

BUILDING 935

		Et MaDharaga/Et Cillam Engrav Study
EMC ENGINEERS, INC. ENVER * ATLANTA * GERMANY	JOB PROJ.# SHEET NO. CALCULATED BY: CHECKED BY:	EMC # 3105.000 OF 1/9/9 Z
CO 4	DATE:	
DOMESTIC HOT	WATER	
FAUCET LOCATION		WATER TEMPERATURE
MEN'S LOCKER RM.		129°F
PROBLEMS:		
COMMENTS:		
<u> </u>		

.

3LDG.#	935 G	N Number Notes	SHEET NO. CALCULATED BY: CHECKED BY: DATE:	1-9-92	OF	
ECO 5	**	MOTO	ORS			·
MOTOR #	5	HP	PH	3	RPM	3460
MODEL #	6-35725-01	VOL	rs 230	AMPS	/2.	8
SERIAL#	t mark out	PRE	SENT HR.	0	TO	2000
MFG	CENTURY	REC	QUIRED HR.	0700	то	1900
FRAME	18270	EFF	82.5	PF	- 28	7,5
DESCRIPTIO	ON 14WP NEAR BOIL		MENTS MAK	LE ALOT	OFN	10156
MOTOR #	6	HP	PH	3	RPM	1740
MODEL#	2N9375	VOL	TS 208	_ AMPS _	14.	7
SERIAL#		PRE	SENT HR.	0	то	2400
MFG	DAYTON.	REC	QUIRED HR.	0700	то	1900
FRAME	215	EFF	86.5	<u> </u>		M-1=
DESCRIPTION	ON AHU- TO NEAR B	OVER COM	MENTS HE	ATING C	NLY	,
	, · · · ·	5 ° 6	·			
MOTOR #	7	HP //	12 PH	<u>/</u>	RPM	1725
MODEL#	M09181 4-84	VOL	. 10-	AMPS		. 6
SERIAL #		PRE	ESENT HR.		то	2400
MFG	Bd	REC	QUIRED HR.		TO	
FRAME		EFF	·			
DECORIDE	DN HW CIRC PUMP.	J	MENTS OFI-	Not 0 18/6		112V

JOB

PROJECT NO.

Ft. McPherson/Ft. Gillem Energy Study

EMC # 3105.000

EMC ENGINEERS, INC.

DENVER * ATLANTA * GERMANY

DENVER * AT	LANTA * GERMANY		PROJECT NO.	EMC # 3105	.000 OF	
BLDG.#	4 35 G.	i	SHEET NO. CALCULATED BY: CHECKED BY: DATE:	1-9-c		
ECO 5		M	отояѕ			
MOTOR #	1.	HP_	1之 PH	3	RPM	1750
MODEL #	184-71275-00		volts 208	AMPS	4.8 M-,	Ē
SERIAL #			PRESENT HR.	0700	то	1900
MFG	WAGNER		REQUIRED HR.	0700	ТО	1900
FRAME	184		EFF.			
		the state of the s		MOTOR .		
MOTOR #	2,3	HP_	3/4 PH		RPM	
MODEL#	• • • • • • • • • • • • • • • • • • • •		volts 240	AMPS _	6.8	
SERIAL #			PRESENT HR.	0000	ТО	2400
MFG	COMFORTMAKER		REQUIRED HR.	0700	то	1900
FRAME	#	2,3	EFF.			
DESCRIPTION	ON AHU FOR RACKETBALL (Z) D> COOLING	COVE	COMMENTS CLEC 208V	30 3	? 7.A	
MOTOR #	AM MODEL ET		3/4 PH	'		1750
MODEL#	HYDRO FLOWELEC. M	TOC	volts 208	AMPS 4	2.5 WINTO	EN
SERIAL#		* x	PRESENT HR.	0	то	2400
MFG /	34G	Nija '	REQUIRED HR.	0700	то	1900
1	• •					
FRAME	203 ON HW PUMP NEAR BO	, 	EFF.			

	GINEERS, INC.	90 JOB PROJECT NO.				em Energy Stu	
DENVER "AILANIA" GERIVIANT		An in a	SHEET NO.	EMC # 3105.000 OF			
		Weder 4.	CALCULATED BY:	K			
	00-1	A DOMEST	CHECKED BY:				
BLDG.#	9356	्ट्रहरू	DATE:	1-9	7-92	7 (1977)	
ECO 5		~мот	ORS			₩ (1) (2)	
MOTOR #	8	HP //	16 PH	<u>/</u>	RPM	17.25	
MODEL #	M10293	1-88 vo	LTS //5	AMPS	2.4	_ *	
SERIAL #		## TXE RPF	RESENT HR.		TO	2400	
MFG	BG	100 AL 400 RE	EQUIRED HR.	· · · · · · · · · · · · · · · · · · ·	.TO	\$1500	
FRAME			FF	.		1 Andre	
DESCRIPTIO	ON HWCIRC. P	COMP #1 CON	MENTS	4 - 4 - 1		imi o o o o o o o o o o o o o o o o o o	
MOTOR #	9		PH	3	RPM	345C	
MODEL #	14 7 36		OLTS 200-230/	460AMPS	9.0-	8-6 m	
SERIAL#		<u> </u>	RESENT HR.	000	то	2400	
MFG	CENTURY	R	EQUIRED HR.	0700	то	1900	
FRAME	456C	E	FF.			M-E	
DESCRIPTION	ON HW CIRC.	PUMP # 7 COM	MENTS		* ;	N. 27 (12 a.c.)	
PART	L56C ON 14W CIR., 8-147017-	07	ar in the	s tawing the first			
				マ		1750	
MOTOR #	10	P PP	PH		RPM	· <u>* 5 14</u>	
MOTOR #	NO MOD#	HP BOOK VO	ン PH DLTS <i>ここの</i> と	AMPS	6. /	<u>* </u>	
MODEL#	10 No moo# 80464	HP BOOK WO		AMPS	6. / TO	→ → → → → → → → → → → → → → → → → → →	
MODEL#	80464		RESENT HR.	AMPS _		140 Oct	
MODEL #	80464	- 10 1 1 1 1 1 P	RESENT HR.	0	то		

	JOB	
	SHEET NO.	OF
E M C ENGINEERS, INC. Denver • Colorado Springs • Atlanta • West German	CALCULATED BY	DATE
retive Colorado Springs - Atlanta - West Germai	CHECKED BY	DATE
Ja 935	SCALE	
		//
Shower - full f 30 xc= 9 90 7.5 9	-(00)	
20 50	,	
30 xcc = 9 qc)a-tr	
1.5 9	cont !	
	, , ,	
low tell	wait fit	

E M C ENGINEERS, INC	OFOF
nver • Colorado Springs • Atlanta • West Germany CHECKED BY	DATE DATE
SCALE	
>8 showers in the memory voins	Control of the contro
- 10w flows howers	
_	

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* N. 1990

Negri

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E M C ENGINEERS, INC. Denver • Colorado Springs • Atlanta • West Germany CHECKED BY _ RONNING. OUH OUH PACICET RACKET BALL OFFICES RADIATOR RADIATOR WOMON HEATE LOCKER WAC COOL ROOM WEIGHT ROOM -MEN RADIATOR EXF. 5F []] BOILER (MEDIUM) CAHU2 (3) HW BOILERS CAMALL)

EMC	EN	GIN	EEF	IS,	INC.
DENVE	R * /	ATLA	NTA *	GE	RMANY

Ft. McPherson/Ft. Gillem Energy Study

PROJ.# EMC # 3105.000

SHEET NO. OF

CALCULATED BY: J W

CHECKED BY: J / J

BLDG.# EC0 15

LIGHTING

ROOM #	# OF			BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF	UNOCC LIGHTS ON
1	36	1	400	METAL HAUS	ON	Y	\mathcal{N}	L.B.	N
2	6	1 /	400	IMH	ON	Y	N	L.B,	N
3	6	1	400	IMH	ON	Y	N	L, B,	N
4	2	4	34	F	ON	N	Y	0	4
5	2	1	50	エ	ON	N.	4	0	Y
6	-3	Z	34	F	ON	4	Y	1.00	N
6	3	2	34	F	ON	7	Y	1	1
6	3	2	34-		ON	1	Y	/	N
7	Unc	las Co	-2015	truct.	on		,		
8	150	1 (150	I	ON	X	Y	1	У
9	9	2	34	F	ON	Y	1/	2	Y
10	8		150	エ	ON	X	У	2	X
2-A	3	1	34	F	ON	Y	У	/	<u> </u>
11	9	2	34	F	ON	S Y	У	2	<u>Y</u>
12	LOCK	ED							
13	4	1	Rest of the second	T	ON	Y	<i>N</i>	1	1 /
14	4	4	34	F	ON	Y	X	1	N
15	1	Ø	2 34	F	OFF	γ	\mathcal{N}		Υ

# OF EXIT SIGNS -	
COMMENTS:	

JOB Ft. McPherson/Ft. Gillem Energy Study

PROJ.# EMC # 3105.000

SHEET NO. OF

CALCULATED BY:

CHECKED BY:

DATE: 1/9/92

BLDG.# 935 EC0 15

LIGHTING

ROOM #	# OF FIXTURES			BULB TYPE	ON/OFF DURING SURVEY	SWITCH YES/NO	GOOD FOR OCC. SENSOR	NO. OF SWITCHES	UNOCC LIGHTS ON
16	3	42	34	F	ON	Y	N	2	У
17	30	2	34	F	ON	Y	N	43	N
18	15	2	34	F	OFF	Y	A Y	3	N
19	W IL	12	34	F	OFF	Y	У	2	N
20	7								
21=	-7	+							
	346	1							
		,			,				
							·		
						,			

# OF EXIT SIGNS -	
COMMENTS:	

E M C ENGINEERS, INC. CALCULATED BY GE DATE Denver • Colorado Springs • Atlanta • West Germany 935 Locker Ladios Lockey SUPPLY